



Procurement Operations

Request for Competitive Sealed Proposals (RFCSP)

Project Title: Stafford Campus Renovations - Bldg B

Project No. 11-38

REQUEST FOR PROPOSALS

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HOUSTON COMMUNITY COLLEGE

REQUEST FOR COMPETITIVE SEALED PROPOSALS - SUMMARY

Date: July 18, 2011

Project Title: Stafford Campus Renovations - Bldg B

Project No.: 11-38

.....
ISSUED BY:

Houston Community College
Procurement Operations
3100 Main Street (11th Floor)
Houston, Texas 77002

SUBMIT INQUIRES TO:

Name: Georgia Coats
Title: Purchasing Agent
Telephone: (713) 718-5004
Fax: (713) 718-2113
Email: georgia.coats@hccs.edu
.....

Project Overview:

Houston Community College ("HCC") is seeking proposals from qualified firms to provide Interior Renovation to Bldg B and other Services at the HCC Stafford Campus. Such work will include but is not limited to, the Interior Renovation of Building B and the demolition of Building A, which will include the removal of temporary buildings. (Please refer to Attachment No. 2, Price Proposal).

Award / Contract Approval:

This Procurement, any award under this procurement, and the resulting contract, if any, is subject to approval by HCC Board of Trustees. Subsequent to Board approval, the only person authorized to commit HCC contractually is the Chancellor or designee. This solicitation is a request for competitive sealed proposals and neither this solicitation nor the response or proposal from any prospective proposer shall create a contractual relationship that would bind HCC until such time as both HCC and the selected proposer sign a legally binding contract, which includes, without limitation, the terms required by HCC as set forth in Attachment No. 4.

Pre-Proposal Meeting:

A non-mandatory pre-proposal meeting will be held a Stafford Campus, 9910 Cash Road, Bldg. B. Stafford on July 27, 2011 at 2:00 P.M. (local time).

Proposal Due Date/Time: HCC will accept sealed proposals in original form to provide the required Stafford Campus Renovations - Bldg B until 2:00 P.M. (local time) on August 09, 2011. Proposals will be received in the Procurement Operations department, 3100 Main Street (11th Floor, Room 11A06), Houston, Texas 77002.

Contract Term: The anticipated contract term for contract(s) awarded resulting from this solicitation, if any, will be one (1) year.

Obligation and Waivers: This Request for Proposal does not obligate HCC to award a contract or pay any costs incurred by the proposer in the preparation and submittal of a proposal.

Bonds: Bonds will be required at the time a purchase order is issued for a specific project or group of projects. (See Attachment 4, Paragraph 25).

Prevailing Wage: The Prevailing Wage Rates for this solicitation are those of the City of Houston, Texas. (See Attachment 4, Paragraph 24).

HCC, IN ITS SOLE DISCRETION, RESERVES THE RIGHT TO ACCEPT ANY PROPOSAL AND/OR REJECT ANY AND ALL PROPOSALS OR A PART OF A PROPOSAL, WITHOUT REASON OR CAUSE, SUBMITTED IN RESPONSE TO THIS SOLICITATION.

HCC RESERVES THE RIGHT TO REJECT ANY NON-RESPONSIVE OR CONDITIONAL PROPOSAL. HCC RESERVES THE RIGHT TO WAIVE ANY INFORMALITIES, IRREGULARITIES AND/OR TECHNICALITIES IN THIS SOLICITATION, THE PROPOSAL DOCUMENTS AND /OR PROPOSALS RECEIVED OR SUBMITTED.

BY SUBMITTING A PROPOSAL, PROPOSER AGREES TO WAIVE ANY CLAIM IT HAS, OR MAY HAVE, AGAINST HOUSTON COMMUNITY COLLEGE SYSTEM AND ITS TRUSTEES OR AGENTS ARISING OUT OF OR IN CONNECTION WITH (1) THE ADMINISTRATION, EVALUATION OR RECOMMENDATIONS OF ANY PROPOSAL; (2) ANY REQUIREMENTS UNDER THE SOLICITATION, PROPOSAL PACKAGE, OR RELATED DOCUMENTS; (3) THE REJECTION OF ANY PROPOSAL OR ANY PART OF ANY PROPOSAL; AND/OR (4) THE AWARD OF A CONTRACT, IF ANY.

HCC reserves the right to withdraw this solicitation at any time for any reason; remove any scope component for any reason and to issue such clarifications, modifications and / or amendments as deemed appropriate.

HCC is an equal opportunity/educational institution, which does not discriminate on the basis of race, color, religion, national origin, gender, age or disability.

INSTRUCTIONS TO PROPOSERS

1. **Introduction**

HCC is seeking proposals under the negotiated method of procurement from qualified firms interested in providing Stafford Campus Renovations - Bldg B in accordance with the Scope of Services contained in this solicitation (Attachment No. 3).

2. **Proposal Submittal**

Proposer(s) shall submit one (1) original and six (6) copies of the technical and price proposals to the address shown below by the date and time specified in this solicitation. In addition to the technical and price proposal, each proposer must complete and return the following documents, if appropriate:

- Proposal / Award Form (Attachment No. 1)
- Determination of Good Faith Effort (Attachment No.5)
- Small Business Unavailability Certificate (Attachment No. 6)
- Small Business Development Questionnaire (Attachment 7) *** Mail separately
- Contractor & Subcontractor/Supplier Participation Form (Attachment No. 8)
- Non-Discrimination Statement (Attachment No. 9)
- Certification & Disclosure Statement (Attachment No. 10)
- Affidavit Form (Attachment No. 11)
- Business Questionnaire (Attachment No. 12)
- Assurance of SBDP Goal (Attachment No. 13)
- Conflict of Interest Questionnaire (Attachment No. 16)
- Disclosures: Financial Interests & Potential Conflicts of Interest (Attachment No. 17)

The envelope containing a proposal shall be addressed as follows:

- Name, Address and Telephone Number of Proposer;
- Project Description/Title;
- Project Number; and
- Proposal Due Date/Time.

All proposals shall be submitted to the following address:

Houston Community College
Procurement Operations
3100 Main Street (11th Floor)
Houston, Texas 77002
Ref: Project No. 11-38
Attn: Georgia Coats

3. **Eligibility for Award**

- a. In order for a proposer to be eligible to be awarded the contract, the proposal must be responsive to the solicitation and HCC must be able to determine that the proposer is responsible and has the resources and capacity to perform the resulting contract satisfactorily.
- b. Responsive proposals are those that comply with all material aspects of the solicitation, conform to the solicitation documents and meet the requirements set forth in this solicitation. Proposals, which do not comply with all the terms and conditions of this solicitation will be rejected as non-responsive.

- c. Responsible proposers, at a minimum, must meet the following requirements:
- Have adequate financial resources, or the ability to obtain such resources as required during the performance of any resulting contract:
 - Be able to comply with the required performance schedule, taking into consideration all existing business commitments:
 - Have a satisfactory record of past performance:
 - Have necessary personnel and management capability to perform any resulting contract:
 - Be qualified as an established firm regularly engaged in the type of business necessary to fulfill the contract requirements:
 - Certify that the firm is not delinquent in any tax owed the State of Texas under Chapter 171, Tax Code; and is not delinquent in taxes owed to the Houston Community College System; signing and submitting the proposal is so certifying to such non-delinquency:
 - Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
- d. Proposer(s) may be requested to submit additional written evidence verifying that the firm meets the minimum requirements described in Section 3 (c) and as necessary to perform the requirements of the solicitation and be determined a responsible proposer. Failure to provide any requested additional information may result in the proposer being declared non-responsive and the proposal being rejected.
- e. A person is not eligible to be considered for award of this solicitation or any resulting contract or to be a subcontractor of the proposer or prime contractor if the person assisted in the development of this solicitation or any part of this solicitation or if the person participated in a project related to this solicitation when such participation would give the person special knowledge that would give that person or a prime contractor an unfair advantage over other bidders.
- f. A person or proposer shall not be eligible to be considered for this solicitation if the person or proposer engaged in or attempted to engage in prohibited communications as described in Section 13 of this solicitation

4. **Preparation of Proposal**

This Request for Proposal contains two parts which must be completed and submitted to the Houston Community College: The technical proposal and the pricing proposal as described herein. Both documents must be received by the date and time established in the solicitation for receipt of proposal.

a. **Technical Proposal:**

The technical proposal shall include, as a minimum, the following information:

- **Cover letter:** The cover letter shall not to exceed 2 pages in length, summarizing key points in the proposal.
- **Experience in Performing General Construction Projects:** This section shall include the management and technical approach, experience in general construction of similar projects related to this RFCSP as well as a description of all services offered by the proposer. Provide project name; firm's role (prime or subcontractor); date completed; construction cost; project size (SF); client/contact names). Experience in performing General Construction projects of equivalent work (required). Provide title of completed projects and total years experience. Include a description of the firm, including firm's history, size, organizational chart, which includes "key" staff members and their respective responsibilities for this project, percent of time to be assigned to this project. Identify Project Manager and Superintendent assigned to this project and resumes of each key person assigned to this project. If personnel substitutions are

contemplated on a contingency basis, they should also be identified. Provide a detailed management plan with defined lines of authority, and current ability to hire and manage subcontractors. Provide a **Construction Schedule/Project Completion Timeline** for the Stafford Campus Renovations - Bldg B. (See Attachment 3, Scope of Services).

- **Project Understanding and Methodology:** This section shall include the firm's knowledge and experience of project requirements, construction philosophy and methodology, process for integrating institutional standards into construction. Detail the methods used and firms quality and control processes. Describe techniques or procedures implemented on previous projects. Specify your firm's maximum project duration per calendar day. (See Attachment 3, Scope of Services).
- **Firm's Financial Status and Bonding Capacity:** This section shall include sound financial status based on review of Firm's Financial Statement for the past three (3) years. (Profit and Loss Statements must be included). Demonstrate total bonding capacity. Provide name of bonding company, telephone number and contact person. Identify bonding agent. Include available bonding capacity and current backlog, if any. (see Attachment 3, Scope of Services).
- **Small Business Participation:** This section shall include a clear statement of the firm's commitment and plan to meet the small business goal specified in this solicitation. Provide detailed information showing small business participation in major project with small business goals that firm has completed.

b. Price Proposal:

The price proposal shall be clearly identified as such in the technical proposal documents. (Refer to Attachment No. 2, Price Proposal).

5. Evaluation Criteria

An Evaluation Committee ("Committee") will review all proposals to determine which proposers have qualified for consideration according to the criteria stated herein. The committee's evaluations will be based on all available information, including qualification statements, subsequent interviews, if necessary, reports, discussions, reference checks, and other appropriate checks. The highest rated proposer(s) evaluated by the Committee **may** be invited to make an oral presentation of their written proposal to the Committee and/or the HCC Board of Trustees. Proposals will be evaluated using the following criteria:

<u>Factor</u>	<u>Maximum Points</u>
• Experience in Performing General Construction Projects:	30
• Project Understanding & Methodology:	30
• Firm's Financial Status & Bonding:	10
• Price Proposal:	15
• Small Business Commitment:	15

Total Points:	100

6. Contract Award

Award of a contract, if awarded, will be made to the proposer, who (a) submits a responsive proposal; (b) is a responsible proposer; and (c) offers the best value to HCC, price and other factors considered. A responsive proposal and a responsible proposer are those that meet the requirements of and are as described in Section 3 or this solicitation. HCC may award a contract, based on initial proposals received, without discussion of such proposals.

Accordingly, each initial proposal should be submitted on the most favorable terms from a price and technical standpoint, which the proposer can submit to HCC.

Except as otherwise may be set forth in this solicitation, HCC reserves the right to waive any informalities, non-material errors, technicalities, or irregularities in the proposals submitted and

documents and consider the proposal for award. HCC also reserves the right to award multiple contracts against this solicitation.

7. **Postponement of Proposals Due Date/Time**

Notwithstanding the date/time for receipt of proposals established in this solicitation, the date and time established herein for receiving proposals may be postponed solely at HCC's discretion.

8. **Oral Presentations**

During the process of selecting a company to provide the required services, oral presentations may or may not be held. Each proposer should be prepared to make a presentation to HCC. The presentations must show that the proposer clearly understands the requirements of the solicitation, and has a strategic plan and approach to complete the work.

9. **Small Business Development Program (SBDP)**

- a. HCC has adopted a Small Business Development Program for small businesses attempting to provide goods and/or services as prime contractors or as subcontractors to other prime contractors to HCC. The program is designed to prevent discrimination by ensuring that small, underutilized and disadvantaged businesses are informed and prepared to compete for HCC procurements. HCC will neither discriminate nor select vendors on the basis of race, color, national origin, religion, gender, age or disability in its procurement selection process.
- b. Small businesses whose gross annual income averaged over the past three (3) years does not exceed the Small Business Administration's size standard as specified in 13 CFR Part 121 are eligible to apply for participation in the program.
- c. For this solicitation, HCC has established twenty-five (**25**) percent of the total contract value (based on actual payments) as its goal for small business participation.
- d. **Good Faith Efforts:** HCC will make a good faith effort to utilize small businesses in all contracts. The annual program goals may be met by contracting directly with small businesses or indirectly through subcontracting opportunities. Therefore, any business that contracts with HCC will be required to make a good faith effort to award subcontracts to small businesses. The subcontracting goal applies to all vendors regardless of their status. By implementing the following procedures, a contractor shall be presumed to have made a good faith effort:
 - e. To the extent consistent with industry practices, divide the contract work into reasonable lots.
 - f. Give notice to SBDP eligible firms of subcontract opportunities or post notices of such opportunities in newspapers and other circulars.
 - g. Document reasons for rejecting a firm that bids on subcontracting opportunities.

10. **Small Business Compliance**

To ensure compliance with any stated small business participation goal, the selected contractor will be required to meet with the HCC Buyer and the HCC Small Business Representative at the 50% and 75% completion phases/dates of the project, to verify small business participation activity and to ensure compliance with the stated small business goal, if any.

11. **Prime Contractor/Contracts for Services**

The prime contractor must perform a minimum of 30% of any contract for services with its labor force and or demonstrate management of the contract for services to the satisfaction of HCC.

12. **Internship Program**

- a. HCC is expanding its student internship program. All vendors are encouraged to make a commitment to utilize certain HCC student(s) in an internship capacity with the company under any resulting contract for services required under this solicitation. The selected contractor will be expected to pay the student(s) at least the minimum wage required by law. HCC will provide the selected contractor with the name of student(s) eligible to

- participate in the internship program.
- b. For additional information regarding the internship program, please contact Dr. Freddie Wade, Director of Workforce Program Initiatives at (713) 718-7596.

13. **Prohibited Communications**

Except as provided in exceptions below, the following communications regarding this solicitation or any other invitation for bids, requests for proposal, requests for qualifications, or other solicitation are prohibited:

- [1] Between a potential vendor, subcontractor to vendor, service provider, proposer, offeror, lobbyist or consultant and any Trustee;
- [2] Between any Trustee and any member of a selection or evaluation committee; and
- [3] Between any Trustee and administrator or employee.

The communications prohibition shall be imposed on the date that responses to the solicitation are due or received, whichever is first.

The communications prohibition shall terminate when:

- [1] The contract is awarded by the Chancellor or designee; or
- [2] The award recommendations are considered by the Board at a duly-noticed public meeting.

In the event the Board refers the recommendation back to staff for reconsideration, the communication prohibition shall be re-imposed.

The communications prohibition shall not apply to the following:

- [1] Duly noted pre-bid or pre-proposal conferences.
- [2] Communications with the HCC General Counsel.
- [3] Emergency contracts.
- [4] Presentations made to the Board during any duly-noticed public meeting.
- [5] Unless otherwise prohibited in the solicitation documents, any written communications between any parties, provided that the originator shall immediately file a copy of any written communication with the Board Services Office. The Board Services Office shall make copies available to any person upon request.
- [6] Nothing contained herein shall prohibit any person or entity from publicly addressing the Board during any duly-noticed public meeting, in accordance with applicable Board policies, regarding action on the contract.

Any potential vendor, subcontractor vendor, service provider, bidder, offerer, lobbyist or consultant who engages or attempts to engage in prohibited communications shall not be eligible for the award of any resulting contract under this solicitation. Any other direct or indirect actions taken to unduly influence competitive purposes, to circumvent equal consideration for competitive bidders, or to disregard ethical and legal trade practices will disqualify bidders, vendors, service providers, lobbyist, consultants, and contractors from both this current and any future consideration for participation in HCC orders and contracts.

14. **Drug Policy**

HCC is a drug-free workforce and workplace. The manufacture, sale, distribution, dispensation, possession or use of illegal drugs (except legally prescribed medications under physician's prescription and in the original container) or alcohol by vendors or contractors while on HCC's premises is strictly prohibited.

15. **Taxes**

HCC is tax exempt as a governmental subdivision of the State of Texas under Section 501C (3) of the Internal Revenue Code. Limited Sales Tax Number: 1-74-1709152-1. No proposal shall include any costs for taxes to be assessed against HCC.

16. **Explanation to Proposers**

Any explanation desired by a prospective proposer regarding the meaning or interpretation of the solicitation documents must be requested in writing and with sufficient time allowed (a minimum of seven (7) calendar days before the date set to receive proposals) for a response to reach prospective proposers before the submission of their proposals. Any HCC response will be in the form of an amendment of the solicitation or an informational letter. The response will be made available to all prospective proposers via HCC website at www.hccs.edu. Receipt of any amendment(s) issued by HCC shall be acknowledged with the proposal submission.

17. **Texas Public Information Act**

HCC considers all information, documentation and other materials requested to be submitted in response to this solicitation to be of a non-confidential and/or non-proprietary nature, and therefore, shall be subject to public disclosure under the Texas Public Information Act (Texas Government Code, Chapter 552.001, et seq.) ("the Act") after a contract if any, is awarded. If the proposer considers any information submitted in response to this request for proposal to be confidential under law or constitute trade secrets or other protected information, the proposer must identify such materials in the proposal response. Notwithstanding the foregoing, the identification of such materials would not be construed or require HCC to act in contravention of its obligation to comply with the Act and the proposer releases HCC from any liability or responsibility for maintaining the confidentiality of such documents.

18. **Appropriated Funds**

The purchase of service or product, which arises from this solicitation, is contingent upon the availability of appropriated funds. HCC shall have the right to terminate the resulting contract at the end of the current or each succeeding fiscal year if funds are not appropriated by the HCC Board of Trustees for the next fiscal year that would permit continuation of the resulting contract. If funds are withdrawn or do not become available, HCC reserves the right to terminate the resulting contract by giving the selected contractor a thirty (30) day written notice of its intention terminate without penalty or any further obligations on the part of HCC or the contractor. Upon termination of the contract HCC shall not be responsible for any payment of any service or product received that occurs after the end of the current contract period or the effective date of termination, whichever is the earlier to occur. HCC's fiscal year begins on September 1 and ends on August 31st.

19. **Conflict of Interest**

If a firm, proposer, contractor or other person responding to this solicitation knows of any material personal interest, direct or indirect, that any member, official or employee of HCC would have in any contract resulting from this solicitation, the firm must disclose this information to HCC. Persons submitting a proposal or response to this solicitation must comply with all applicable laws, ordinances, and regulations of the State of Texas Government Code, including, without limitation, Chapter 171 and 176 of the Texas Government Code. As applicable, the person submitting a response to this solicitation must complete and submit **Attachment No. 16, Conflict of Interest Questionnaire Form.**

20. **Ethics Conduct**

Any direct or indirect actions taken to unduly influence competitive purposes, to circumvent equal consideration for competitive bidders, or to disregard ethical and legal trade practices will disqualify vendors and contractors from current and future consideration for participation in HCC orders and contracts.

21. **No Third Party Rights**

This Contract is made for the sole benefit of the HCC and the Contractor and their respective successors and permitted assigns. Nothing in this Contract shall create or be deemed to create a relationship between the Parties to this Contract and any third person, including a relationship in the nature of a third-party beneficiary or fiduciary.

22. **Submission Waiver**

By submitting a response to this RFP, the Offerer or respondent agrees to waive any claim it has or may have against Houston Community College System and its trustees, employees or agents arising out of or in connection with (1) the Administration, evaluation or recommendation of any offer or response; (2) any requirements under the solicitation, the solicitation or response package or related documents; (3) the rejection of any offer or any response or any part of any offer or response; and/or (4) the award of a contract, if any.

ATTACHMENT NO. 1

HOUSTON COMMUNITY COLLEGE

REQUEST FOR PROPOSALS

PROPOSAL/CONTRACT AWARD FORM

.....
PROJECT TITLE: Stafford Campus Renovations - Bldg B
PROJECT NO.: 11-38
.....

Name of Proposer/Contractor: _____

Address: _____

Telephone: _____

Fax: _____

E-mail: _____

Receipt of Proposal Amendment Number(s): _____

.....
In compliance with the requirements of this Request for Proposals for _____, the undersigned hereby proposes to furnish all necessary resources required to perform the services in accordance with the Technical and Price Proposal dated _____ and as mutually agreed upon by subsequent negotiations, if any.

Signed By: _____

Name: _____
(Type or Print)

Title: _____
(Type or Print)

ACCEPTANCE AND CONTRACT AWARD FORM

(Note: This page will be completed by HCC.)



Purchase Order No. _____ (for payment purposes only)

Project No. 11-38



Contractor to perform the work required herein in accordance with Purchase Order(s) issued by HCC and the Terms and Conditions of Purchase posted on the HCC website at www.hccs.edu, incorporated herein by reference, and the prices, scope of services and general terms and conditions attached hereto and made a part hereof.

HOUSTON COMMUNITY COLLEGE

Executed for and on behalf of the Houston Community College pursuant to approval by the Board of Trustees on _____, 2011

Signed By: _____

Title: Executive Director, Procurement Operations

ATTACHMENT NO. 2

**PRICE PROPOSAL
FOR
Stafford Campus Renovations - Bldg B**

The Proposer/Contractor shall furnish all necessary resources and services necessary and required to provide Stafford Campus Renovations - Bldg B, in accordance with the Project Manual and Architectural Drawings hereby incorporated and made a part of this RFCSP and the general terms and conditions of the sample contract for the prices listed below. Please provide a **Project Total Proposed Price** reflecting all project costs to successfully complete the Stafford Campus Renovations - Bldg B. Work requirements will be specified in individual purchase orders issued by Houston Community College. **Please submit this form in separate, sealed envelope with your technical proposal and label it "Price Proposal".**

ITEM	DESCRIPTION OF WORK/ITEMS	Proposed Price
001	REMOVAL OF EXISTING PAVEMENTS AND STRUCTURES	\$
002	STORM DRAINS AND UTILITIES	\$
003	EARTHWORK: CLEARING, EXCAVATION, FILL, GRADING	\$
004	DEMOLITION - INTERIOR BUILDING "B"	\$
005	DEMOLITION - BUILDING "A"	\$
006	ELECTRICAL SERVICE UPGRADE	\$
007	SECURITY – IT CABLING WILL BE AN HCC ALLOWANCE	\$
008	INFORMATION TECHNOLOGY CABLING (HCC ALLOWANCE INFORMATION WILL BE PROVIDE PRIOR TO CONTRACT)	\$
009	SECURITY (CAMERAS & OTHER SURVEILLANCE EQUIPMENT) (HCC ALLOWANCE INFORMATION WILL BE PROVIDED PRIOR TO CONTRACT)	\$
010	SIGNAGE ALLOWANCE (INTERIOR)	\$
011	OTHER COSTS: ITEMIZE AND DESCRIBE ON SEPARATE PAGE	\$
012	OVERHEAD AND PROFIT	\$
013	CONTINGENCY (10%)	\$

Total Proposed Price (Items 001-013): \$_____

Note: Total proposed price must equal the total line item cost for items 001-013

Proposer's Maximum Project Duration in Calendar Days: _____

ATTACHMENT NO. 3
PERFORMANCE OF WORK
FOR
STAFFORD CAMPUS RENOVATIONS - BLDG B

I. General

Houston Community College ("HCC") is seeking qualified General Construction Contractors to provide Renovation Services for the Stafford Campus located at:
9910 Cash Road, Stafford, TX 77477.

II. Scope

The 9910 Cash road project consists of the demolition of Building "A" (approximate size 11,000 square feet), selective demolition of equipment and coverings around Building "B" and the removal of temporary buildings and sheds.

The interior of Building B (approximate size 36,000 square feet), is to be demolished to provide space for interior build-out for the future performing arts department. This portion of work must be complete and ready for **occupancy no later than March 1st 2012**.

Civil improvements include storm drain line replacement.

The estimated construction cost of \$2,400,000.00 – \$2,800,000.00 Million plus a 10% contingency.

Project Manual, Specifications and Drawings can be accessed on the link below:

<http://app.e-builder.net/Bidders/Landing.aspx?BidPackageID={4d1b12ff-650a-4085-8ec9-26584cf23139}>

ATTACHMENT NO. 4

GENERAL TERMS AND CONDITIONS

1. Contract Award

A response to the solicitation is an offer to contract with Houston Community College ("HCC") based on the terms and conditions contained therein. Proposals do not become contracts until they are accepted by HCC through issuance of written purchase orders, a contract signed by both parties, or other duly executed documents. The general terms and conditions in this Attachment No. 4, the applicable requirements and provisions of the proposal, and other provisions required by HCC shall be included in any resulting contract.

2. Contract Term

The contract term for contract(s) awarded resulting from this solicitation will be one (1) year unless extended or terminated by HCC in accordance with the terms and conditions of this contract.

3. Period of Performance

A. The term of this contract shall commence upon issuance of the first purchase order/work request, whichever shall constitute a written notice to proceed, or within ninety (90) calendar days of the Notice of Contract Award, whichever is earlier.

B. The period of performance for each work request/purchase order shall be as specified in the individual work request/purchase order. The Contractor agrees to meet the required performance schedule as set forth in each work request/purchase order.

C. When the Contractor considers the work specified in each work request/purchase order complete and ready for its intended use, the Contractor shall request the HCC Representative to inspect the work to determine the status of completion. When the HCC Representative determines the work to be substantially complete, the HCC Representative will issue a Certificate of Substantial Completion for the work as stated in the particular work request/purchase order.

4. Interpretation, Jurisdiction and Venue

The Contract shall be construed and interpreted solely in accordance with the laws of the State of Texas, without regard to its choice of law provisions. Venue of any suit, right or cause of action arising under or in connection with the contract shall be exclusively in a court of competent jurisdiction located in Harris County, Texas.

5. Compliance with Laws

The selected contractor shall give all notices and comply with all Federal, State of Texas and local laws. Upon request, the selected contractor shall furnish to HCC certificates of compliance with all such laws.

6. Taxes

HCC is tax exempt as a governmental subdivision of the State of Texas under Section 501C (3) of the Internal Revenue Code. Limited Sales Tax Number: 1-74-1709152-1. The contract shall not contain any requirement for HCC to pay sales or other taxes from which it is exempt under applicable law.

7. Termination for Convenience

HCC may, at its option and discretion, terminate the resulting contract for convenience and, at its option and discretion, may reduce the statement of work or other requirements of the contract at any time, without any default on the part of HCC or the contractor, by giving ninety (90) calendar days written notice thereof to the contractor.

8. Termination for Default

HCC may terminate the contract immediately for default, by giving written notice thereof to the contractor, if the contractor fails to execute the work properly; performs in a manner that is unsatisfactory to HCC, breaches any terms, conditions, covenants, or provisions of the contract or otherwise fails to meet its obligations under the contract. In the event of termination for default, HCC shall have against the contractor, all remedies provided by law and equity. HCC, in its discretion, may include a provision granting the contractor a reasonable opportunity to cure contractor's default depending on the nature of the breach or default.

9. Third Party Rights

The resulting contract shall contain the following provision: Nothing in this Contract, whether express or implied, will be construed to give any person or entity (other than the parties hereto and their permitted successors and assigns) any legal or equitable right, remedy, or claim under or in respect of any terms or provisions contained in this Contract or any standing or authority to enforce the terms and provisions of this Contract. Nothing contained herein shall be construed to or operate to create any rights in any person, party, or entity who is not a party to this Contract including, but not limited to, any rights in the nature of a third-party beneficiary.

10. Ethics Conduct

Any breach of any HCC ethics policies, rules or regulations; any violation of any ethics laws or prohibitions; and any direct or indirect actions taken to unduly influence competitive processes, to circumvent equal consideration for competitive proposers, or to disregard ethical and legal trade practices will disqualify vendors and contractors from current and future consideration for participation in HCC solicitations, proposal awards, orders and contracts.

11. Conflict of Interest

HCC expects the Contractor to comply with Chapter 176 of the Texas Education Code and that failure to comply is grounds for termination of the Contract.

12. Small Business Development Program (SBDP)

To the extent required by the solicitation, the contract shall require the selected contractor to agree to attain small business participation goal or target set forth in the solicitation. The contractor further shall agree to enter into agreements for the Work identified in Attachment 8 of the solicitation, entitled Contractor and Subcontractor/Supplier Participation. The subcontracting goal applies to all vendors regardless of their status. The contractor's failure to comply with the aforementioned small business participation provisions may result in:

- Withholding of payment until such compliance is achieved or a waiver of the provisions is provided by HCC.
- Revocation of any benefits and incentives provided under the program or suspension or termination of the contract in whole or in part.
- For this contract, HCC has established **25** percent of the total contract value (based on actual payments) as its goal for small business participation.

13. Small Business Compliance

The contract shall require the contractor meet with the HCC Buyer and the HCC Small Business Representative at the 50% and 75% completion phases/dates of the contract, to verify small business participation activity and to ensure compliance with the small business goal stated in the contract, if any.

14. Prime Contractor/Contract for Services

If the resulting contract is for services, the contract shall require that the contractor perform a minimum of 30% of the work with its labor force or demonstrate management of the work to the satisfaction of HCC.

15. Changes

HCC shall have the right, at any time, to make changes within the scope of the contract. If such change causes a material increase in the contractor's cost and/or the time for performance, the contractor shall so notify HCC in writing within ten (10) calendar days from the date of the contractor's receipt of the notice of change, and an equitable adjustment in the price and/or the time of performance shall be mutually agreed upon between the parties. No such change shall be effective in the absence of express written acceptance and direction of HCC. Notwithstanding the foregoing, any increase in the cost or price under the contract of \$50,000 or more shall require approval by the HCC Board of Trustees before effective.

16. Insurance Requirements

The Contractor agrees to comply with the insurance requirements contained in Exhibit H.

17. Indemnification

The Contractor shall indemnify, defend and hold HCC, its agents, employees, trustees and other officers harmless from any and all losses, damages, harm of any type or character (including attorney's fees and costs of suit) regardless of the nature or theory of the claim, whether negligence, contractual, extracontractual, or otherwise arising from or by reason of any act or omission of the contractor, its agents, servants, officers, directors and employees in the performance of the contract.

18. Independent Contractor

It is agreed and understood that the contractor shall be deemed to be an independent contractor in all its operations and activities hereunder; that the employees furnished by the contractor to perform the services required by the contract shall be deemed to be contractor's employees or independent subcontractors; that contractor's employees shall be paid by the contractor; that contractor and its employees shall be responsible for all obligations and reports covering social security, unemployment insurance, income tax, and other reports and deductions required by State and Federal law. The contractor shall indemnify, defend, and hold HCC, its trustees, officers, employees, agents, and representatives harmless from any claims relating to the payment of salary, compensation, benefits, worker's compensation, or taxes to contractor's employees or agents

19. Assignment

The contractor may not assign or transfer any of its rights, duties or obligations under this Agreement, in whole or in part, without the prior written consent of HCC. This contract shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and permitted assigns.

20. Notices

All notices by either party to the other shall be in writing, delivered personally, by certified or registered mail, return receipt requested, or by overnight courier, and shall be deemed to have been duly given when delivered personally or when deposited in the United States mail, postage prepaid addressed as follows:

Houston Community College:
Procurement Operations (11th Floor)
3100 Main Street
Houston, Texas 77002
ATTN: Executive Director, Procurement Operations

Contractor:

ATTN:_____

21. Invoicing and Payment

The Contractor shall submit an original invoice to the address shown below for the services which have been inspected and accepted by HCC:

Houston Community College
Accounts Payable
P.O. Box 667460
Houston, Texas 77266-7460
Reference Project No. 11-38 and the applicable purchase order number.

- Generally, payment will be made within thirty (30) calendar days after receipt of a properly prepared invoice or acceptance of the goods or services, whichever is later. Payment shall be considered made when HCC deposits the contractor's payment in the mail or the date on which an electronic transfer of funds occurs.
- Request for pay application must have certified payroll submitted upon completion. Must comply with updated city of Houston prevailing wage rates.

22. Compensation

As full consideration for the satisfactory performance by the Contractor of this Contract, HCC shall pay to the Contractor the amounts specified in the individual purchase order.

23. Appropriated Funds

The purchase of any service or product under the resulting contract beyond the initial contract period is contingent upon the availability of appropriated funds. HCC shall have the right to terminate the resulting contract at the end of the current or each succeeding fiscal year if funds are not appropriated by the HCC Board of Trustees for the next fiscal year that would permit continuation of the resulting contract. If funds are withdrawn or do not become available, HCC reserves the right to terminate the contract by giving the contractor a thirty (30) day written notice of its intention to terminate without penalty or any further obligations on the part of HCC or the contractor. Upon termination of the contract, HCC shall not be responsible for any payment of any service or product received that occurs after the end of the current contract period – or the effective date of termination, whichever comes first. HCC's fiscal year begins on September 1 and ends on August 31st.

24. Prevailing Wage Rate

The Contractor shall compensate all employees performing work under this contract at the rates set forth in Exhibit F, City of Houston Prevailing Wage Rates for Building Construction.

25. Performance and Payment Bonds

• **Payment Bond:**

The Contractor shall furnish a Payment Bond in the amount equal to one hundred percent (100%) of the contract amount if the contract or purchase order is in excess of \$25,000.

• **Performance Bond:**

The Contractor shall furnish a Performance Bond in the amount equal to one hundred percent (100%) of the contract or purchase order amount if the contract is in excess of \$100,000.00. The bonds must be executed by a corporate surety authorized to do business in Texas and licensed in Texas to issue surety bonds, and must be executed by a surety company that is authorized and admitted to write surety bonds in Texas. If the amount of the bond exceeds \$100,000.00, the surety must:

- Hold a certificate of authority from the U.S. Secretary of the Treasury to qualify as a surety on obligations permitted or required under federal law; or
- Have obtained reinsurance for any liability in excess of \$100,000.00 from a reinsurer that is authorized and admitted as a reinsurer in Texas and is the holder of a certificate of authority from the U.S. Secretary of the Treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

The Performance and Payment Bonds must be submitted to the Purchasing Department within fourteen (14) calendar days after receipt of a copy of the executed contract or a written notice of contract award. The bonds must be made payable to Houston Community College System.

The Contractor will be required to supply the applicable bonds prior to the issuance of a purchase order by HCC and prior to any work being performed. All costs to obtain the applicable bonds are the responsibility of the Contractor. Once a Contractor is selected and a contract is negotiated, in accordance with requirements in the contract, the Contractor will:

- a) Submit a copy of the bonds to their surety company;
- b) The surety company will complete the forms and submit the completed forms DIRECTLY to the HCC Project Manager;
- c) The Project Manager may contact the Surety Company to verify the validity of the submitted documents;
- d) The submitted documents will be submitted to HCC for review and signature;
- e) Upon receipt of the District signature, the Project Manager will begin either the contractual process, or, issue a purchase order for the project.

26. Force Majeure

To the extent that either party to this Agreement shall be wholly or partially prevented from the performance within the terms specified of any obligation or duty placed on such party by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident, by order of any court, legislative action, act of God, or specific cause reasonably beyond the parties' control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of Force-Majeure shall rest solely with HCC.

27. Permits

The Contractor shall, without additional expenses to HCC, be responsible for obtaining any necessary licenses and permits, and for complying with Federal, State municipal laws, codes and regulations applicable to the performance of the contract.

28. Safety

This Contractor shall be responsible for compliance with all safety rules regulations of the Federal Occupational Safety and Health Act of 1970 and those of HCC and all applicable state and local laws, ordinances and regulations during the performance of this contract.

29. Criminal Background Checks

The Contractor(s) shall perform a criminal background check on each employee who services HCC and has reason to visit any HCC campus or facility. Criminal background checks must be performed on each employee on an annual basis and all information regarding the criminal background check must be maintained by the Contractor and made available to HCC upon request of the Director of Maintenance.

30. Internship Program

The Houston Community College (HCC) is expanding its student internship program. All Contractors are encouraged to make a commitment to utilize certain HCC students in an internship capacity with the firm under any resulting contract for services required under this solicitation. HCC will provide the selected contractor with the names of student eligible to participate in the internship program.

30. Entire Agreement

The resulting contract and its accompanying exhibits contain the entire understanding of the parties regarding the services or materials and subject matter contained in the contract and supersedes all prior agreements, oral or written, and all other communications between the parties relating to the subject matter. This contract shall not be amended or modified, except by mutual written agreement between and signed by the parties to the contract.

ATTACHMENT NO. 5

DETERMINATION OF GOOD FAITH EFFORT

Proposer _____

Address _____

Phone _____

Fax Number _____

In making a determination that a good faith effort has been made, HCC requires the Proposer to complete this form and submit supporting documentation explaining in what ways the Proposer has made a good faith effort to attain the goal. The Proposer will respond by answering "yes" or "no" to the following and provide supporting documentation.

- _____ (1) Whether the Proposer provided written notices and/or advertising to at least five (5) certified small businesses or advertised in general circulation, trade association and/or small businesses focus media concerning subcontracting opportunities.
- _____ (2) Whether the Proposer divided the work into the reasonable portions in accordance with standard industry practices.
- _____ (3) Whether the Proposer documented reasons for rejection or met with the rejected small business to discuss the rejection.
- _____ (4) Whether the Proposer negotiated in good faith with small businesses, not rejecting qualified subcontractors who were also the lowest responsive bidder.

NOTE: If the Proposer is unable to meet the solicitation goal or if any of the above items (1-4) are answered "no", the Proposer must submit a letter of justification.

Signature of Proposer

Title

Date

**ATTACHMENT NO. 6
SMALL BUSINESS UNAVAILABILITY CERTIFICATE**

I, _____, _____, of
 (Name) (Title)

 (Name of proposer's company)

certify that on the date(s) shown, the small businesses listed herein were contacted to solicit Proposals for Materials or Services to be used on Project #11-38.

DATE CONTACTED	SMALL BUSINESS Name	TELEPHONE NO.	CONTACT PERSON	MATERIALS OR SERVICES	RESULTS
1.					
2.					
3.					
4.					
5.					
6.					

To the best of my knowledge and belief, said small business was unavailable for this solicitation, unable to prepare a proposal or prepared a proposal that was rejected for the reason(s) stated in the RESULTS column above.

The above statement is a true and accurate account of why I am unable to commit to awarding subcontract(s) or supply order(s) to the small business listed above.

NOTE: This form to be submitted with all Proposal documents for waiver of small business participation. (See Instructions to Proposers)

Signature: _____

**ATTACHMENT NO. 7
SMALL BUSINESS DEVELOPMENT QUESTIONNAIRE**

Note: Vendors are to complete this form along with a **copy** of the Contractor and Subcontractor/Supplier Participation Form and return it in a separate envelope to:

**Houston Community College
Procurement Operations/Small Business Representative
Post Office Box 667517
Houston, Texas 77266-7517
Ref: HCC Project No. 11-38**

FIRM NAME: _____

FIRM ADDRESS: _____

TELEPHONE: _____

FAX NUMBER: _____

EMAIL ADDRESS: _____

CONTACT PERSON'S NAME AND PHONE NO. _____

SIGNATURE OF FIRM'S AUTHORIZED OFFICIAL: _____

NAME AND TITLE (Type or Print): _____

COMPANY MAJORITY OWNERSHIP (Check one in each column)

<u>ETHNICITY</u>	<u>GENDER</u>	<u>LOCATION</u>
___ African American (AA)	___ Male	___ Houston (H)
___ Asian Pacific American (APA)	___ Female	___ Texas (T)
___ Caucasian (C)		___ Out of State (O)
___ Hispanic American (HA)		Specify State ___
___ Native American (NA)		___ Public Owned (PO)
___ Other (O) Specify _____		

BUSINESS CLASSIFICATION

___ DBE Disadvantaged Business Enterprise	___ SB Small Business
___ WBE Women Owned Business Enterprise	___ MBE Minority Business Enterprise
___ HUB Historically Underutilized Business	___ Other: _____

Please provide information regarding certifying agency (if any)

Name of Agency	Certificate Number	Expiration Date
_____	_____	_____
_____	_____	_____
_____	_____	_____

ATTACHMENT NO. 8

CONTRACTOR AND SUBCONTRACTOR PARTICIPATION FORM

Proposer/offeror presents the following participants in this solicitation and any resulting Contract. All proposers / offerors, including small businesses submitting proposals as prime contractors, are required to demonstrate good faith efforts to include eligible small businesses in their proposal submissions.

CONTRACTOR	Specify in Detail Type of Work to be Performed	Indicate below, the following: Small Business (SB) and Certification Status, if any (i.e. SB – COH, METRO, etc.)	Percentage of Contract Effort	Price
Business Name:				
Business Address:				
Telephone No. :				
Contact Person Name/E-mail:				
SMALL BUSINESS SUBCONTRACTOR(S) (Attach separate sheet if more space is needed.)				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
NON-SMALL BUSINESS SUBCONTRACTOR(S) (Attach separate sheet if more space is needed.)				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				

Business Name: _____ Submitted By (Name): _____

Address: _____

Telephone/Fax: _____ Date: _____

Contractor 's Price/Total: \$ _____
 Small Business
 Subcontractor (s) Price/Total: \$ _____
 Non-Small Business
 Subcontractors Price/Total: \$ _____
 Grand Total: \$ _____

ATTACHMENT NO. 9

NON-DISCRIMINATION STATEMENT

The undersigned certifies that he/she will not discriminate against any employee or applicant for employment or in the selection of subcontractors because of race, color, age, religion, gender, national origin or disability. The undersigned shall also take action to ensure that applicants are employed, and treated during employment, without regard to their race, color, religion, gender, age, national origin or disability. Such action shall include, but shall not be limited to, the following: employment, upgrading or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other compensation and selection for training, including apprenticeship.

Name/Title: _____
(Type or Print)

Signature: _____ Date: _____

Company Name: _____
(Type or Print)

Address: _____

Telephone Number: _____

ATTACHMENT NO. 10

CERTIFICATION AND DISCLOSURE STATEMENT

A person or business entity entering into a contract with HCC is required by Texas Law to disclose, in advance of the contract award, if the person or an owner or operator of the business entity has been convicted of a felony. The disclosure should include a general description of the conduct resulting in the conviction of a felony as provided in section 44.034 of the Texas Education Code. The requested information is being collected in accordance with applicable law. This requirement does not apply to a publicly held corporation.

If an individual:
Have you been convicted of a felony? YES or NO

If a business entity: YES or NO

Has any owner of your business entity been convicted of a felony? _____

Has any operator of your business entity been convicted of a felony? _____

If you answered yes to any of the above questions, please provide a general description of the conduct resulting in the conviction of the felony, including the Case Number, the applicable dates, the State and County where the conviction occurred, and the sentence.

I attest that I have answered the questions truthfully and to the best of my knowledge.

By: _____ Date: _____

Name: _____

Title: _____

Business Entity: _____

Signature of Firm's Authorized Official: _____

State of Texas

Sworn to and subscribed before me at _____

Texas, this the _____ day of _____, 2011

Notary Public for the State of: _____

ATTACHMENT NO. 11

AFFIDAVIT FORM

This company, contractor, or subcontractor agrees to refrain from discrimination in terms and conditions of employment on the basis of race, color, religion, sex, physical handicap, or national origin, and agrees to take affirmative action as required by Federal Statutes and Rules and Regulations issued pursuant thereto in order to maintain and ensure nondiscriminatory employment practices.

Signed: _____

Name of Company: _____

Address of Company: _____

State of Texas

Sworn to and subscribed before me at _____, _____,
(City) (State)

this the _____ day of _____, 2011.

Notary Public for the State of: _____

ATTACHMENT NO. 12
BUSINESS QUESTIONNAIRE

FIRM NAME: _____

FIRM ADDRESS: _____

TELEPHONE: _____

FAX NUMBER: _____

EMAIL ADDRESS: _____

CONTACT PERSON'S NAME AND PHONE NO. (Type or Print):

SIGNATURE OF FIRM'S AUTHORIZED OFFICIAL: _____

NAME AND TITLE (Type or Print): _____

Do you or any officer, partner, owner, sales representative and/or spouse work for Houston Community College? _____ Yes _____ No

If yes, please specify: _____

State in which your home office / headquarters is located? _____

If headquarters is located out of state, does that state have preferential treatment on Proposals? _____

If yes, list percentage. _____%

Name of Financial Institution _____ Contact Person _____

Title _____

Please indicate how you became aware of this procurement? Source: _____

*Example: Newspapers (Chronicle, La Informacion, Voice of Asia, African American News, etc.)
Houston Minority Business Council, HCC Website, Chamber of Commerce, etc.)*

TYPE OF ORGANIZATION

Individual Sole Proprietorship
 Partnership Corporation, Incorporated in _____

Federal Employer Identification Number _____
 (Note: please refer to Attachment No. 14, Vendor Application Instructions)

How long in business under present name _____

Number of persons now employed _____

BUSINESS CLASSIFICATION

<input type="checkbox"/> DBE Disadvantaged Business Enterprise	<input type="checkbox"/> SB Small Business
<input type="checkbox"/> WBE Women Owned Business Enterprise	<input type="checkbox"/> MBE Minority Business Enterprise
<input type="checkbox"/> HUB Historically Underutilized Business	<input type="checkbox"/> Other: _____

** HCC is an equal opportunity / educational institution, which does not discriminate on the basis of race, religion, national origin, gender, age or disability. HCC encourages small and disadvantaged businesses to seek procurement opportunities.*

REFERENCES

List three references (local or otherwise) which have been or are now your customer and at least one in which you have performed comparable work in quantity and scope to that specified in this solicitation.

	Name of Firm	Address	Point of Contact	Telephone #
1.	_____			
2.	_____			
3.	_____			

State of Texas

Sworn to and subscribed before me at _____

Texas, this the _____ day of _____, 2011

Notary Public _____

for the State of: _____

ATTACHMENT NO. 13
ASSURANCE OF SBDP GOAL

The undersigned certifies that he/she has read, understands and agrees to be bound by the small business provisions set forth in this Solicitation. The undersigned further certifies that he/she is legally authorized to make the statements and representations in the Solicitation and that said statements and representations are true and accurate to the best of his/her knowledge. The undersigned will enter into formal agreement(s) for work identified on the **CONTRACTOR AND SUBCONTRACTOR PARTICIPATION** form conditioned upon execution of a contract with HCC. The undersigned agrees to attain the small business utilization percentages of the total offer amount as set forth below:

Small Business Participation Goal = _____%

The undersigned certifies that the firm shown below has not discriminated against any small business or other potential subcontractor because of race, color, religion, gender, age, veteran's status, disability or national origin, but has provided full and equal opportunity to all potential subcontractors irrespective of race, color, religion, gender, age, disability, national origin or veteran status.

The undersigned understands that if any of the statements and representations are made knowing them to be false or there is a failure to implement any of the stated commitments set forth herein without prior approval of HCC's Chancellor or the duly authorized representative, the Proposer may be subject to the loss of the contract or the termination thereof resulting from this proposal and could be ineligible for future HCC contract awards.

Signature _____

Title _____

Date of Signature _____

Firm Name _____

Address _____

Telephone Number _____

ATTACHMENT NO. 14

VENDOR APPLICATION INSTRUCTIONS

The Houston Community College Procurement Operations department has developed an online vendor application. This is designed to allow firms or individuals that are interested in doing business with HCC to register online and become part of our vendor database. Once registered, you will receive a password and personal login information that will allow you to modify your vendor information anytime a change occurs with your company. You will have the flexibility to add or delete commodity lines, update phone numbers and contact information, etc. This database will allow HCC to notify, via email, all companies that match the desired commodity criteria for procurement opportunities within Houston Community College. What a great way to never miss out on an HCC bid or proposal opportunity again.

Please take a moment to go to the Houston Community College Procurement Operations department website and register as a vendor. The website address to access the vendor registration form is http://hccs.aecglobal.com/Supplier_Registration_Form.asp

Once you have completed your application, please print out a copy of the completed application and submit it with your completed proposal package. If you do not have internet access you are welcome to use a computer at any HCC library to access the website and register.

ATTACHMENT NO. 15

INSURANCE REQUIREMENTS

The following insurance coverage and limits listed herein are the minimum that the Contractor/Vendor is required to carry during performance of the contract for:

Project Title: Stafford Campus Renovations - Bldg B
Project Number: 11-38

1. Commercial General Liability for Bodily Injury / Property Damage Limits:

- A. Occurrence/Personal Injury/Advertising
- B. Products / Completed Operations \$1,000,000.00 CSL
- C. Annual Aggregate \$2,000,000.00 CSL
- D. Products Aggregate \$2,000,000.00 CSL
- E. Fire, Lightning or Explosion \$1,000,000.00 CSL
- F. Medical Expense \$5,000.00 Per person

2. Automobile Liability:

- Bodily Injury/Property Damage \$1,000,000.00 CSL

3. Workers' Compensation

- Part Statutory
- A-
- Part B- \$1,000,000.00 Each Accident
- \$1,000,000.00 Policy Limits
- \$1,000,000.00 Each Employee

4. Endorsements

The following endorsements and other stated information is required on the original certificate of insurance:

- A. 90-Day Notice of Cancellation;
- B. Houston Community College (HCC) to be named as Additional Insured on all policies except Workers' Compensation;
- C. Waiver of Subrogation on all policies;
- D. The assigned project number and/or purchase order number.

5. Submission of Certificate of Insurance:

The original certificate of insurance, indicating the coverage, limits and endorsements stated herein, shall be furnished to HCC within **fourteen (14)** calendar days of the HCC Board of Trustees approval of the contract award. The Contract will not be awarded until after receipt of the proper certificate of insurance.

Mail the original certificate of insurance to:
ATTN: Georgia Coats, Purchasing Agent
Procurement Operations
Houston Community College
PO Box 667517 (MC 1118)
Houston, TX 77266-7517

Note: CSL denotes "Combined Single Limit"

ATTACHMENT NO. 16

CONFLICT OF INTEREST QUESTIONNAIRE		FORM CIQ
For vendor or other person doing business with local governmental entity		OFFICE USE ONLY
<p>This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.</p> <p>This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).</p> <p>By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.</p> <p>A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.</p>	<p>Date Received</p>	
<p>1 Name of person who has a business relationship with local governmental entity.</p>		
<p>2 <input type="checkbox"/> Check this box if you are filing an update to a previously filed questionnaire.</p> <p>(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)</p>		
<p>3 Name of local government officer with whom filer has employment or business relationship.</p> <p align="center">_____</p> <p align="center">Name of Officer</p> <p>This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.</p> <p>A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?</p> <p align="center"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?</p> <p align="center"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?</p> <p align="center"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>D. Describe each employment or business relationship with the local government officer named in this section.</p>		
<p>4</p> <p align="center">_____</p> <p align="center">Signature of person doing business with the governmental entity</p> <p align="right">_____</p> <p align="right">Date</p>		

Adopted 06/29/2007

ATTACHMENT NO. 17

DISCLOSURES

FINANCIAL INTERESTS AND POTENTIAL CONFLICTS OF INTERESTS

Texas Local Government Code Chapter 176 requires that vendors desiring to enter into certain contracts with a local governmental entity must disclose the financial and potential conflict of interest information as specified below.

Vendor shall disclose the financial interest and potential conflict of interest information identified in Sections 1 through 3 below as a condition of receiving an award or contract. Submit this information along with your bid, proposal, or offer. **This form must be received by HCC Office of Systemwide Compliance before the vendor's bid, proposal, or offer will be considered received or evaluated.** Completed forms must be **NOTARIZED** and delivered to:

Houston Community College

Attn: Procurement

3100 Main Street

Houston, TX 77002

With a copy to:

Houston Community College

Attn: Office of System-wide Compliance, Compliance Officers

3100 Main. Street

Houston, TX 77002

This requirement applies to contracts with a value exceeding \$50,000.

Section 1 - Disclosure of Financial Interest in the Vendor

a. If any officers or employees of HCC ("individuals") have one of the following financial interests in the vendor (or its principal) or its subcontractor(s), please show their name and address and check all that apply and (include additional documents if needed):

Name: _____

Address: _____

Ownership interest exceeding 10%

Ownership interest exceeding \$15,000 or more of the fair market value of vendor

Distributive Income Share from Vendor exceeding 10% of individual's gross income

Real property interest with fair market value of at least \$2,500

Person related to or married to individual has ownership or real property interest in Vendor

No individuals have any of the above financial interests

(If none, go to Section 2)

b. For each individual named above, show the type of ownership/distributable income share:

sole proprietorship ___ stock ___ partnership ___

other (explain) _____

c. For each individual named above, show the **dollar value or proportionate share** of the ownership interest in the vendor (or its principal) or its subcontractor (s) as follows:

If the proportionate share of the named individual(s) in the ownership of the vendor (or its principal) or subcontractor of vendor is 10% or less, and if the value of the ownership interest of the named individual(s) is \$15,000 or less of the fair market value of vendor, check here (___).

If the proportionate share of ownership exceeds 10%, or the value of the ownership interest exceeds \$15,000 of the fair market value of vendor, show either:

the percent of ownership _____%, or
the value of the ownership interest \$_____

Section 2 - Disclosure of Potential Conflicts of Interest

For each of the individuals having the level of financial interest identified in Section 1 above, and for any other HCC individual not identified in Section 1 above check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If "Yes," please describe (use space under applicable section-attach additional pages as necessary).

a. Employment, currently or in the previous eighteen (18) months, including but not limited to contractual employment for services for vendor. Yes ___ No ___

b. Employment of individual's spouse, father, mother, son, or daughter, including but not limited to contractual employment for services for vendor in the previous eighteen (18) months.

Yes ___ No ___

Section 3- Disclosure of Gifts

For each of the individuals having the level of financial interest identified in Section 1 above, and for any other HCC individual not identified in Section 1 above check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If "Yes," please describe (use space under applicable section-attach additional pages as necessary).

a. Received a gift from vendor (or principal), or subcontractor of vendor, of \$250 or more within the preceding 12 months.

Yes ___ No ___

b. Individual's spouse, father, mother, son, or daughter has received a gift from vendor (or principal), or subcontractor of vendor, of \$250 or more within the preceding 12 months.

Yes ___ No ___

This disclosure is submitted on behalf of

(Name of Vendor)

Certification. I hereby certify that to the best of my knowledge and belief the information provided by me in this disclosure statement is true and correct. I understand that failure to disclose the information requested may result in my bid, proposal, or offer, being rejected, and/or may result in prosecution for knowingly violating the requirements of **Texas Local Government Code Chapter 176**. I understand that it is my responsibility to comply with the requirements set forth by HCC as it relates to this disclosure. I also understand that I must submit an updated disclosure form within seven (7) days of discovering changes in the significant financial interests of the individuals I identified in Section 1 of this disclosure or if individuals that were not identified, later receive a financial interest in my company or a subcontractor of my company.

Official authorized to sign on behalf of vendor:

Name (Printed) _____ Title _____

Signature _____ Date _____

AFFIX NOTARY SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20____, to certify which, witness my hand and seal of office.

"NOTE: RESPONDENT MUST COMPLETE THE ABOVE "DISCLOSURE OF FINANCIAL INTERESTS AND POTENTIAL CONFLICTS OF INTERESTS" FORM. FAILURE TO COMPLETE AND RETURN THIS FORM WITH YOUR OFFER MAY RESULT IN YOUR OFFER BEING CONSIDERED AS "NON-RESPONSIVE" TO THIS SOLICITATION."

For assistance with completing this form, please contact the **Office of System-wide Compliance** at (713)718-8233 or 8295.

ATTACHMENT NO. 18

**Uniform General and Supplementary General Conditions
for Houston Community College
Building Construction Contracts**

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Uniform General and Supplementary General Conditions for Houston Community College Building Construction Contracts

Article 1. Definitions

Unless the context clearly requires another meaning, the following terms have the meaning assigned herein.

1.1 *Architect/Engineer (A/E)* means a person registered as an architect pursuant to Tex. Occ. Code Ann., Chapter 1051, as a landscape architect pursuant to Tex. Occ. Code Ann., Chapter 1052, a person licensed as a professional engineer pursuant Tex. Occ. Code Ann., Chapter 1001 and/or a firm employed by Owner or Design-Build Contractor to provide professional architectural or engineering services and to exercise overall responsibility for the design of a Project or a significant portion thereof, and to perform the contract administration responsibilities set forth in the Contract.

1.2 *Change Order* means a written modification of the Contract between the Owner and Contractor, signed by the Owner, the Contractor and the Architect/Engineer.

1.3 *Change Order Proposal* means a Contractor -generated document in response to a Change Order Request (COR).

1.4 *Change Order Request (COR)* means a document which informs the Contractor of a proposed change in the Work, and appropriately describes or otherwise documents such change.

1.5 *Close-out documents* means the product brochures, product/equipment maintenance and operations instructions, manuals, and other documents/warranties, as-built record documents, affidavit of payment, release of lien and claim, and as may be further defined, identified, and required by the Contract Documents.

1.6 *Contract* means the entire agreement between the Owner and the Contractor, including all of the Contract Documents.

1.7 *Contract Date* is the date when the agreement between the owner and the Contractor becomes effective.

1.8 *Contract Documents* means those documents identified as a component of the agreement (contract) between the owner and the Contractor. These may include, but are not limited to, Drawings, Specifications, General, Supplementary and Special Conditions, and all pre-bid and/or pre-proposal addenda.

1.9 *Contractor* means the individual, corporation, company, partnership, firm or other entity contracted to perform the Work, regardless of the type of construction contract used, so that the term as used herein includes a Contractor or a Design-Build firm as well as a General or Prime Contractor. The contract documents refer to Contractor as if singular in number.

1.10 *Contract Sum* means the total compensation payable to the Contractor for completion of the Work in accordance with the terms of the contract.

1.11 *Contract Time* means the period between the Start Date identified in the Notice to Proceed with Construction and the Substantial Completion date identified in the Notice to Proceed or as subsequently amended by Change Order.

1.12 *Date of Commencement* means the date designated in the Notice to Proceed for the Contractor to commence the Work.

- 1.13 *Day* means a calendar day, unless otherwise specifically stipulated.
- 1.14 *Drawings* mean that product of the Architect/Engineer which graphically depicts the Work.
- 1.15 *Final Completion* means the date determined and certified by the Architect/Engineer and Owner on which the Work is fully and satisfactorily complete in accordance with the Contract.
- 1.16 *Owner* means Houston Community College, the State of Texas and any Agency of the State of Texas, acting through the responsible entity of Houston Community College identified in the Contract as the Owner.
- 1.17 *Owner's Designated Representative (ODR)* means the individual assigned by the Owner to act on its behalf, and to undertake certain activities as specifically outlined in the Contract. The ODR is the only party authorized to direct changes to the scope, cost, or time of the contract.
- 1.18 *Project* means all activities necessary for realization of the Work. This includes design, contract award(s), execution of the Work itself, and fulfillment of all contract and warranty obligations.
- 1.19 *Samples* means representative physical examples of materials, equipment or workmanship, used to confirm compliance with requirements and/or to establish standards for use in execution of the Work.
- 1.20 *Schedule of Values* means the detailed breakdown of the cost of the materials, labor and equipment necessary to accomplish the Work as described in the Contract Documents, submitted by Contractor for approval by Owner and Architect/Engineer.
- 1.21 *Shop Drawings* means the drawings, diagrams, illustrations, schedules, performance charts, brochures and other data prepared by the Contractor or its agents, which detail a portion of the Work.
- 1.22 *Site* means the geographical area of the location of the Work.
- 1.23 *Special Conditions* means the documents containing terms and conditions, which may be unique to the project. Special Conditions are a part of the Contract Documents and have precedence over the Uniform General Conditions.
- 1.24 *Specifications* means the written product of the Architect/Engineer that establishes the quality and/or performance of products utilized in the Work and processes to be used, including testing and verification for producing the Work.
- 1.25 *Subcontractor means* a business entity that enters into an agreement with the Contractor to perform part of the Work or to provide services, materials or equipment for use in the Work.
- 1.26 *Substantial Completion* means the date determined and certified by the Contractor, Architect/Engineer and Owner when the Work or a designated portion thereof is sufficiently complete, in accordance with the Contract, so as to be operational and fit for the use intended.
- 1.27 *Supplementary General Conditions* means procedures and requirements that modify the Uniform General Conditions. Supplementary General Conditions, when used, have precedence over the Uniform General Conditions.

1.28 *Unit Price Work* means Work or a portion of the Work paid for based on incremental units of measurement.

1.29 *Unilateral Change Order (ULCO)* means a Change Order issued by the Owner without the agreement of the Contractor.

1.30 *Work* means the administration, procurement, materials, equipment, construction and all services necessary for the Contractor, and/or its agents, to fulfill the Contractors obligations under the Contract.

Article 2. Laws Governing Construction

2.1. Environmental Regulations. The Contractor conducts activities in compliance with applicable laws and regulations and other requirements of the Contract relating to the environment, and its protection at all times. Unless otherwise specifically determined, the Owner is responsible for obtaining and maintaining permits related to storm water run-off. The Contractor shall conduct operations consistent with storm water run-off permit conditions. Contractor is responsible for all items it brings to site, including hazardous materials, and all such items brought to the site by its subcontractor and suppliers, or by other entities subject to direction of the Contractor. The Contractor shall not incorporate hazardous materials into the Work without prior approval of Owner, and shall provide an affidavit attesting to such in association with request for Substantial Completion inspection.

2.2. Wage Rates. The Contractor shall not pay less than the wage scale of the various classes of labor as shown on the "Prevailing Wage Schedule" provided by the Owner. The specified wage rates are minimum rates only. The Owner is not bound to pay any claims for additional compensation made by any Contractor because the Contractor pays wages in excess of the applicable minimum rate contained in the Contract. The "Prevailing Wage Schedule" is not a representation that qualified labor adequate to perform the Work is available locally at the prevailing wage rates.

2.2.1 Notification to Workers. The Contractor shall notify each worker, in writing, of the following as they commence work on the contract: the worker's job classification, the established minimum wage rate requirement for that classification, as well as the worker's actual wage. The notice must be delivered to and signed in acknowledgement of receipt by the employee and must list both the wages and fringe benefits to be paid or furnished for each classification in which the worker is assigned duties. When requested by the Owner, the Contractor shall furnish evidence of compliance with the Texas Prevailing Wage Law.

2.2.1.1 Submit a copy of each worker wage-rate notification to the ODR with the application for progress payment for the period during which the worker was engaged in activities on behalf of the project.

2.2.1.2 The "Prevailing Wage Schedule" is determined by the Owner in compliance with Tex. Gov't Code, Chapter 2258. Should the Contractor at any time become aware that a particular skill or trade not reflected on the Owner's Prevailing Wage Schedule will be or is being employed in the Work, whether by the Contractor or by a Subcontractor, the Contractor shall promptly inform the ODR of the proposed wage to be paid for the skill along with a justification for same. The Contractor is responsible for determining the most appropriate wage for a particular skill in relation to similar skills or trades identified on the Prevailing Wage Schedule. In no case

shall any worker be paid less than the wage indicated for Laborers.

2.2.1.3 Penalty for Violation. The Contractor and any Subcontractor will pay to the Owner a penalty of sixty dollars (\$60) for each worker employed for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the Prevailing Wage Schedule.

2.2.1.4 Complaints of Violations

2.2.1.4.1 Owner's Determination of Good Cause. Upon receipt of information concerning a violation of Tex. Gov't Code, Chapter 2258, the Owner will, within 31 days, make an initial determination as to whether good cause exists that a violation occurred. The Owner will send documentation of the initial determination to the Contractor against whom the violation was alleged, and to the worker involved. Upon making a good-cause finding, the Owner will retain the full amounts claimed by the claimant or claimants as the difference between wages paid and wages due under the Prevailing Wage Schedule and any supplements thereto, together with the applicable penalties, such amounts being subtracted from successive progress payments pending a final decision on the violation

2.2.1.4.2 If the Contractor and claimant worker reach an agreement concerning the claim, the Contractor shall promptly notify the Owner in a written document countersigned by the worker.

2.2.1.4.3 Arbitration Required. If the violation is not resolved within 14 days following initial determination by the Owner, the Contractor and the claimant worker must participate in binding arbitration in accordance with the Texas General Arbitration Act, Tex. Civ. Prac. & Rev. Code, Chapter 171. For a period not to exceed 10 days, after which, if no agreement reached, a district court may be petitioned by any of the parties to the arbitration to appoint an arbitrator whose decision will be binding on all parties.

2.2.1.4.4 Arbitration Award. If an arbitrator assesses an award against the Contractor, the Contractor shall promptly furnish a copy of said award to the Owner. The Owner may use any amounts retained under Article 2.2.1.4.1 to pay the worker the amount as designated in the arbitration award. If the retained funds are insufficient to pay the worker in accordance with the arbitration award, the worker has a right of action against the Contractor, and/or the surety to receive the amount owed, plus attorneys' fees and court costs. The Owner has no duty to release any funds to either the claimant or the Contractor until it has received the notices of agreement or the arbitration award.

2.2.1.4.5 No Extension of Time. If the Owner's determination proves valid that good cause existed to believe a violation had occurred, the Contractor is not entitled to an extension of time for any delay arising directly or indirectly from of the arbitration procedures set forth herein.

2.3. Venue for Suits. The venue for any suit arising from this contract will be in a court of competent jurisdiction in Houston, Harris County, Texas, or as may otherwise designated in the Supplementary General Conditions.

2.4. Licensing of Trades. The Contractor shall comply with all applicable provisions of state law related to license requirements for skilled tradesmen, Contractors, suppliers or laborers, as necessary to accomplish the Work. In the event the Contractor, or one of its

Subcontractors, loses its license during the term of performance of the Contract, the Contractor shall promptly hire or contract with a licensed provider of the service at no additional cost to the Owner.

2.5. Royalties, Patents & Copyrights. The Contractor shall pay all royalties and license fees, defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof.

2.6. State Sales and Use Taxes. The Owner qualifies for exemption from certain State and Local Sales and Use Taxes pursuant to the provisions of Tex. Tax Code, Chapter 151. The Contractor may claim exemption from payment of applicable State taxes by complying with such procedures as prescribed by the State Comptroller of Public Accounts. Owner is not required to reimburse Contractor for taxes paid on items that qualify for tax exemption.

Article 3. General Responsibilities of Owner & Contractor

3.1. Owner's General Responsibilities. The Owner is the entity identified as such in the Contract and referred to throughout the Contract Documents as if singular in number.

3.1.1 Preconstruction Conference. Prior to, or concurrent with, the issuance of Notice to Proceed with Construction, a conference will be convened for attendance by the Owner, Contractor, Architect/Engineer (AE) and appropriate Subcontractors. The purpose of the conference is to establish a working understanding among the parties as to the Work, the operational conditions at the project site, and general administration of the Project. Topics include communications, schedules, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, maintaining required records and all other matters of importance to the administration of the Project and effective communications between the project team members.

3.1.2 Owner's Designated Representative. Prior to the start of construction, Owner will identify the Owner's Designated Representative (ODR), who has the express authority to act and bind the Owner to the extent and for the purposes described in the various Articles of the Contract, including responsibilities for general administration of the Contract.

3.1.2.1 Unless otherwise specifically defined elsewhere in the contract documents, the ODR is the single point of contact between the Owner and Contractor. Notice to the ODR, unless otherwise noted, constitutes notice to the Owner under the Contract.

3.1.2.2 All directives on behalf of the Owner will be conveyed to the Contractor by the ODR in writing.

3.1.3 Owner Supplied Materials and Information.

3.1.3.1 The Owner will furnish to the Contractor those surveys describing the physical characteristics, legal description, limitations of the site, site utility locations, and other information used in the preparation of the Contract Documents.

3.1.3.2 The Owner will provide information, equipment, or services under the Owner's control to the Contractor with reasonable promptness.

3.1.4 Availability of Lands. The Owner will furnish, as indicated in the Contract, all required rights to use the lands upon which the Work occurs. This includes rights-of-way and easements for access and such other lands that are designated for use by the Contractor. The Contractor shall comply with all Owner identified encumbrances or restrictions specifically related to use of lands so furnished. The Owner will obtain and pay for easements for permanent structures or permanent changes in existing facilities, unless otherwise required in the Contract Documents.

3.1.5 Limitation on Owner's Duties

3.1.5.1 The Owner will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, technologies, sequences or procedures of construction or the safety precautions and programs incident thereto. The Owner is not responsible for any failure of Contractor to comply with laws and regulations applicable to the Work. The Owner is not responsible for the failure of Contractor to perform or furnish the Work in accordance with the Contract Documents. Owner is not responsible for the acts or omissions of Contractor, or any of its Subcontractor, suppliers or of any other person or organization performing or furnishing any of the Work on behalf of the Contractor.

3.1.5.2 The Owner will not take any action in contravention of a design decision made by the AE in preparation of the Contract Documents, when such actions are in conflict with statutes under which the AE is licensed for the protection of the public health and safety.

3.2 Role of Architect/Engineer. Unless specified otherwise in the Contract between the Owner and the Contractor, the AE shall provide general administration services for the Owner during the construction phase of the project. Written correspondence, requests for information, and shop drawings/submittals shall be directed to the AE for action. The AE has the authority to act on behalf of the Owner to the extent provided in the Contract Documents, unless otherwise modified by written instrument, which will be furnished to the Contractor by the ODR upon request.

3.2.1 Site Visits

3.2.1.1 The AE will make visits to the site at intervals as provided in the AE's contract agreement with the Owner, to observe the progress and the quality of the various aspects of Contractor's executed Work and report findings to the Owner.

3.2.1.2 The AE has the authority to interpret Contract Documents and inspect the Work for compliance and conformance with the Contract. Except as referenced in Article 3.1.5.2, the Owner retains the sole authority to accept or reject Work and issue direction for correction, removal, or replacement of Work.

3.2.2 Clarifications and Interpretations. It may be determined that clarifications or interpretations of the Contract Documents are necessary. Upon direction by the ODR such clarifications or interpretations will be provided by the AE consistent with the intent of the Contract Documents. The AE will issue these clarifications with reasonable promptness to the Contractor as Architect's Supplemental Instruction (ASI) or similar instrument. If the Contractor believes that such clarification or interpretation justifies an adjustment in the Contract Sum or the Contract Time, the Contractor shall so notify the Owner in accordance with the provisions of Article 11.

3.2.3 Limitations on Architect/Engineer Authority. The AE is not responsible for:

3.2.3.1 The Contractor's means, methods, techniques, sequences, procedures, safety, or programs incident to the Project nor will the AE supervise, direct, control or have authority over the same.

3.2.3.2 The Failure of Contractor to comply with laws and regulations applicable to the furnishing or performing the Work.

3.2.3.3 The Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

3.2.3.4 Acts or omissions of the Contractor, or of any other person or organization performing or furnishing any of the Work.

3.3 Contractor's General Responsibilities. The Contractor is solely responsible for implementing the Work in full compliance with all applicable laws and the contract documents and shall supervise and direct the Work using the best skill and attention to assure that each element of the Work conforms to the Contract requirements. The Contractor is solely responsible for all construction means, methods, techniques, safety, sequences, coordination and procedures. ***The Contractor is responsible for visiting the site and being familiar with local conditions such as the location, accessibility, and general character of the site and/or building.***

3.3.1 Project Administration. The Contractor shall provide project administration for all Subcontractors, vendors, suppliers, and others involved in implementing the Work and shall coordinate administration efforts with those of the AE and ODR in accordance with these General Conditions and provisions of Division 1 Specifications, and as outlined in the Pre-construction Conference.

3.3.1.1 The Contractor shall furnish to the ODR one copy of the current edition of Means Facility Cost Data at no additional cost. This document shall be in either hard copy format or electronic CD, at option of the ODR.

3.3.1.2 The Contractor shall furnish to the ODR one copy of the current edition of the "Rental Rate Blue Book for Construction Mobilization Costs" at no additional cost. This document shall be in either hard copy format or electronic CD, at option of the ODR.

3.3.2 Contractor's Superintendent. Employ a competent resident superintendent who will be present at the Project Site during the progress of the Work. The superintendent is subject to the approval of the ODR. Do not change approved superintendents during the course of the project without the written approval of the ODR unless the superintendent leaves the employ of the Contractor.

3.3.3 Labor. Provide competent, suitably qualified personnel to survey, lay-out, and construct the Work as required by the Contract Documents. Maintain good discipline and order at the Site at all times.

3.3.4 Services, Materials, and Equipment. Unless otherwise specified, provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities, incidentals, and services necessary for the construction, performance, testing, start-up, inspection and completion of the Work.

3.3.5 Non-Compliant Work. Should the AE and/or the ODR identify Work as non-compliant with the Contract Documents, the ODR will communicate the finding to the Contractor and the Contractor will correct such Work at its expense. The approval of Work by either the AE or ODR does not relieve the Contractor from the obligation to comply with all requirements of the Contract Documents.

3.3.6 Subcontractors. Do not employ any Subcontractor, supplier or other person or organization, whether initially or as a substitute, against whom the Owner may have reasonable objection. The Owner will communicate such objections in writing. The Contractor is not required to employ any Subcontractor, supplier or other person or organization to furnish any of the work to whom the Contractor has reasonable objection. The Contractor will not substitute Subcontractors without the acceptance of the Owner.

3.3.6.1 All Subcontracts and supply contracts shall be consistent with and bound to the terms and conditions of the Contract Documents including provisions of the Agreement between the Contractor and the Owner.

3.3.6.2 The Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with the Contractor. Require all Subcontractors, suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with Owner only through the Contractor. Furnish to the Owner a copy of each first-tier subcontract promptly after its execution. The Contractor agrees that the Owner has no obligation to review or approve the content of such contracts and that providing the Owner such copies in no way relieves the Contractor of any of the terms and conditions of the Contract, including, without limitation, any provisions of the Contract which require the Subcontractor to be bound to the Contractor in the same manner in which the Contractor is bound to the Owner.

3.3.7 Continuing the Work. Carry on the Work and adhere to the progress schedule during all disputes, disagreements or alternative resolution processes with the Owner. Do not delay or postpone any Work because of the pending resolution of any disputes, disagreements or processes, except as the Owner and the Contractor may agree in writing.

3.3.8 Cleaning. At all times, keep the Site and the Work clean and free from accumulation of waste materials or rubbish caused by the construction activities under the Contract. The Contractor shall ensure that the entire Project is thoroughly cleaned prior to requesting Substantial Completion Inspection and, again, upon completion of the Project prior to the final inspection.

3.3.9 Acts and Omissions of Contractor, its Subcontractors and Employees. The Contractor is responsible for acts and omissions of his employees and all its Subcontractors, their agents and employees. The Owner may, in writing, require the Contractor to remove from the Project any of Contractor's or its Subcontractors employees that the ODR finds to be careless, incompetent, or otherwise objectionable.

3.3.10 Indemnification of Owner. The Contractor covenants and agrees to FULLY INDEMNIFY and HOLD HARMLESS, the Owner and the elected officials, employees, officers, directors, volunteers, and representatives of the Owner, individually or

collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal or bodily injury, death and property damage, made upon the Owner directly or indirectly arising out of, resulting from or related to Contractor's activities under this Contract, including any acts or omissions of Contractor, any agent, officer, director, representative, employee, consultant or the Subcontractor of Contractor, and their respective officers, agents, employees, directors and representatives while in the exercise of performance of the rights or duties under this Contract. The indemnity provided for in this paragraph does not apply to any liability resulting from the negligence of the Owner, officers or employees, separate Contractor s or assigned Contractors, in instances where such negligence causes personal injury, death or property damage. IN THE EVENT CONTRACTOR AND OWNER ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY WILL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE STATE UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.

3.3.10.1 The provisions of this Indemnification are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

3.3.10.2 Promptly advise the Owner in writing of any claim or demand against the Owner or the Contractor known to the Contractor related to or arising out of the Contractor's activities under this Contract.

3.3.11 Ancillary Areas. Operate and maintain operations and associated storage areas at the site of the Work in accordance with the following:

3.3.11.1 Confine all Contractor operations, including storage of materials and employee parking upon the Site of Work, to areas designated by the Owner.

3.3.11.2 The Contractor may erect, at its own expense, temporary buildings that will remain its property. Remove such buildings and associated utility service lines upon completion of the Work, unless the Contractor requests and the Owner provides written consent that it may abandon such buildings and utilities in place.

3.3.11.3 Use only established roadways or construct and use such temporary roadways as may be authorized by the Owner. Do not allow load limits of vehicles to exceed the limits prescribed by appropriate regulations or law. Provide protection to road surfaces, curbs, sidewalks, trees, shrubbery, sprinkler s, drainage structures and other like existing improvements to prevent damage and repair any damage thereto at the expense of the Contractor.

3.3.11.4 The Owner may restrict the Contractor's entry to the site to specifically assigned entrances and routes.

3.3.12 Separate Contracts. Additional Contractor responsibilities when the Owner awards separate Contracts

3.3.12.1 The Owner reserves the right to award other contracts in connection with other portions of the Project under these or similar contract conditions.

3.3.12.2 The Owner reserves the right to perform operations related to the Project with the Owner's own forces.

3.3.12.3 Under a separate contract, the conditions described herein continue to apply except as may be amended by change order.

3.3.12.4 ***The Contractor shall cooperate with other Contractors employed on the project by the Owner, including providing access to site and project information as requested.***

Article 4. Small Business (SB) Subcontracting Plan

4.1. General Description. The purpose of the Small Business (SB) Program is to promote equal business opportunities for economically disadvantaged businesses to contract with the HCC in accordance with the goals specified in HCC Small Business Requirements.

4.1.1 State agencies are required by statute to make a good faith effort to assist SBs in participating in contract awards issued by the State. 1 TAC §111.11-111.28, outline the state's policy to encourage outreach to and potential utilization of SBs in state contracting opportunities through race, ethnic and gender neutral means.

4.1.2 A Contractor who contracts with the HCC in an amount of \$100,000 is required to make a good faith effort to award subcontracts to SBs in accordance with HCC Board policy by submitting a SB Subcontracting Plan at the time of bidding and complying with the SB Subcontracting Plan after it is accepted by the Owner and during the term of the contract.

4.2. Compliance with Approved SB Subcontracting Plan. Contractor, having been awarded this Contract in part by complying with the SB Program policies, hereby covenants to continue to comply with the SB Program as follows:

4.2.1 Prior to substituting a SB Subcontracting Plan the Contractor will promptly notify the Owner in the event a change is required for any reason; the Owner must approve and accept the substituted SB Subcontracting Plan.

4.2.2 Conduct the good faith effort activities required and provide the Owner with necessary documentation to justify approval of a change to the approved SB Subcontracting Plan.

4.2.3 Cooperate in the execution of a Change Order or such other approval of the change in the SB Subcontracting Plans as the Contractor and Owner may agree to.

4.2.4 Maintain and make available to Owner upon request business records documenting compliance with the accepted SB Subcontracting Plan.

4.2.5 Upon receipt of payment for performance of Work, submit to Owner a compliance report, in the format required by the Owner that demonstrates Contractor's performance of the SB Subcontracting Plan.

4.2.6 Promptly and accurately explain and provide supplemental information to Owner to assist in the Owner's investigation of the Contractor's good faith effort to fulfill the SB Subcontracting Plan and the requirements under 1 TAC §111.14.

4.3. Failure to Demonstrate Good Faith Effort. Upon a determination by Owner that Contractor has failed to demonstrate a good faith effort to fulfill the SB Subcontracting Plan or any contract covenant detailed above, the Owner may, in addition to all other remedies available to it, may bar the Contractor from future contracting opportunities with the Owner.

Article 5. Bonds & Insurance

5.1. Construction Bonds. The Contractor is required to tender to Owner, prior to commencing the Work, performance and payment bonds, as required by Tex. Gov't Code, Chapter 2253.

5.1.1. A Performance Bond is required if the Contract Price is in excess of \$100,000. The Performance Bond is solely for the protection of the Owner. The Performance Bond is to be for the Contract Sum to guarantee the faithful performance of the Work in accordance with the Contract Documents. The form of the bond shall be approved by the bond approved by Attorney General of Texas. The Performance Bond shall be effective through the Contractor's warranty period.

5.1.2. A Payment Bond is required if the Contract Price is in excess of \$25,000. The payment bond is to be for the Contract Sum and is payable to the Owner solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the Contractor or a Subcontractor. The form of the bond shall be the bond approved by the Attorney General of Texas.

5.1.3. Bond Requirements. Each bond shall be executed by a corporate surety or sureties authorized to do business in the State of Texas and acceptable to the Owner, on the Owner's form, and in compliance with the relevant provisions of the Texas Insurance Code. If any bond is for more than 10 percent of the surety's capital and surplus, the Owner may require certification that the company has reinsured the excess portion with one or more reinsurers authorized to do business in the State. A reinsurer may not reinsure for more than 10 percent of its capital and surplus. If a surety upon a bond loses its authority to do business in the State, the Contractor shall, within thirty (30) days after such loss, furnish a replacement bond at no added cost to the Owner.

5.1.4. Power of Attorney. Each bond shall be accompanied by a valid Power-of-Attorney (issued by the surety company and attached, signed and sealed with the corporate embossed seal, to the bond) authorizing the attorney in fact who signs the bond to commit the company to the terms of the bond, and stating any limit in the amount for which the attorney can issue a single bond.

5.1.5. Bond Indemnification. The process of requiring and accepting bonds and making claims thereunder shall be conducted in compliance with Tex. Gov't Code, Chapter 2253. IF FOR ANY REASON A STATUTORY PAYMENT OR PERFORMANCE BOND IS NOT HONORED BY THE SURETY, THE CONTRACTOR SHALL FULLY INDEMNIFY AND HOLD THE OWNER HARMLESS OF AND FROM ANY COSTS, LOSSES, OBLIGATIONS OR LIABILITIES IT INCURS AS A RESULT.

5.1.6. Furnishing Bond Information. Owner shall furnish certified copies of the payment bond and the related Contract to any qualified person seeking copies who complies with Tex. Gov't Code, §2253.026.

5.1.7. Claims on Payment Bonds. Claims on payment bonds must be sent directly to the Contractor and his surety in accordance with Tex. Gov't Code § 2253.041. All Payment Bond claimants are cautioned that no lien exists on the funds unpaid to the Contractor on such Contract, and that reliance on notices sent to the Owner may result in loss of their rights against the Contractor and/or his surety. The Owner is not responsible in any manner to a claimant for collection of unpaid bills, and accepts no such responsibility because of any representation by any agent or employee.

5.1.8. Payment Claims when Payment Bond not Required. The rights of Subcontractors regarding payment are governed by Tex. Prop. Code, §§ 53.231 – 53.239 when the value of the Contract between the Owner and the Contractor is less than \$25,000.00. These provisions set out the requirements for filing a valid lien on funds unpaid to the Contractor as of the time of filing the claim, actions necessary to release the lien and satisfaction of such claim.

5.1.9 Sureties shall be listed on the US Department of the Treasury's Listing Approved Sureties stating companies holding Certificates of Authority as A-acceptable sureties on Federal Bonds and acceptable reinsuring companies (Department Circular 570).

5.2. Insurance Requirements.

The Contractor shall carry insurance in the types and amounts indicated in this Article for the duration of the Contract. The required insurance shall include coverage for Owner's property in the care, custody and control of Contractor prior to construction, during construction and during the warranty period. The insurance shall be evidenced by delivery to the Owner of certificates of insurance executed by the insurer or its authorized agent stating coverages, limits, expiration dates and compliance with all applicable required provisions. Upon request, the Owner, and/or its agents, shall be entitled to receive without expense, copies of the policies and all endorsements. The Contractor shall update all expired policies prior to submission for monthly payment. Failure to update policies shall be reason for withholding of payment until renewal is provided to the Owner.

5.2.1. The Contractor shall provide and maintain the insurance coverage with the minimum amounts described below until the end of the warranty period unless otherwise stated in Supplementary General Conditions. Failure to maintain insurance coverage, as required, is grounds for Suspension of Work for Cause pursuant to Article 14. The Contractor will be notified of the date on which the Builder's Risk insurance policy may be terminated through Substantial Completion Notices, Acceptance Notices and/or other means as deemed appropriate by the Owner.

5.2.2. Coverage shall be written on an occurrence basis by companies authorized and admitted to do business in the State of Texas and rated A- or better by A.M. Best Company or otherwise acceptable to Owner.

5.2.2.1. Insurance coverage required includes:

5.2.2.1.1. Workers' Compensation. Insurance with limits as required by the Texas Workers' Compensation Act, with the policy endorsed to provide a waiver of subrogation as to the Owner, Employer's Liability insurance of not less than:

\$1,000,000 each accident

\$1,000,000 disease each employee

\$1,000,000 disease policy limit

5.2.2.1.2. Commercial General Liability Insurance. Including Independent Contractor's liability, Products and Completed Operations and Contractual Liability, covering, but not limited to, the liability assumed under the indemnification provisions of this contract, fully insuring Contractor's (or Subcontractors) liability for bodily injury and property damage with a combined bodily injury (including death) and property damage minimum limit of :

\$1,000,000 per occurrence

\$1,000,000 general aggregate

\$1,000,000 products and completed operations aggregate

Coverage shall be on an "occurrence" basis.

The policy shall include coverage extended to apply to completed operations and explosion, collapse, underground hazards. The policy shall include endorsement CG2503 Amendment-Aggregate Limits of Insurance (Per Project) or its equivalent.

5.2.2.1.3. Asbestos Abatement Liability Insurance, including coverage for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos containing materials. *This requirement applies if the Work or the Project includes asbestos containing materials.

The Combined single limit for bodily injury and property damage will be a minimum of \$1,000,000 per occurrence.

*Specific Requirement for Claims-Made Form: Required period of coverage will be determined by the following formula: Continuous coverage for life of the contract, plus one (1) year (to provide coverage for the warranty period), and an extended discovery period for a minimum of five (5) years which shall begin at the end of the warranty period.

If this contract is for asbestos abatement only, the All-Risk Builder's Risk or All-Risk Installation Floater (e) is not required.

5.2.2.1.4. Comprehensive Automobile Liability Insurance, covering owned, hired, and non-owned vehicles, with a combined bodily injury (including death) and property damage minimum limit of \$1,000,000 per occurrence. No aggregate shall be permitted for this type of coverage.

Such insurance is to include coverage for loading and unloading hazards.

5.2.2.1.5. All Risk Builder's Risk Insurance (or All Risk Installation Floater for instances in which the project involves solely the installation of equipment). Coverage shall be All-Risk, including, but not limited to, Fire, Extended Coverage, Vandalism and Malicious Mischief, Flood, Earthquake, Theft and damage resulting from faulty workmanship, design or materials. If Builder's Risk, limit shall be equal to 100 percent of the contract. If Installation Floater, limit shall be equal to 100 percent of the contract cost. The policy shall be written jointly in the names of the Owner, the Contractor, Subcontractors and, Subsubcontractors shall be named as additional insured. The policy shall have endorsements as follows:

5.2.2.1.5.1. This insurance shall be specific as to coverage and not contributing insurance with any permanent insurance maintained on the property.

5.2.2.1.5.2. This insurance shall not contain an occupancy clause suspending or reducing coverage should the Owner occupy, or begin beneficial occupancy before the Owner has accepted final completion.

5.2.2.1.5.3. Loss, if any, shall be adjusted with and made payable to the Owner as Trustee for the insureds as their interests may appear; the right of subrogation under the Builder's Risk policy shall be waived as to the Owner. The Owner shall be named as Loss Payee. For renovation projects or projects that involve portions of work contained within an existing structure, refer to Special Conditions for possible additional Builder's Risk insurance requirements.

5.2.2.1.6. "Umbrella" Liability Insurance. The Contractor shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring the Contractor (or Subcontractor) for an amount of not less than amount specified in the Supplementary General Conditions or Special Conditions that provides coverage at least as broad as and applies in excess and follows form of the primary liability coverages required hereinabove. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted.

If this contract is for asbestos abatement only, the "Umbrella" Excess Liability is not required

5.2.3. Policies must include the following clauses, as applicable:

5.2.3.1. This insurance shall not be canceled, materially changed, or non-renewed until after thirty (30) days prior written notice has been given to the Owner.

5.2.3.2. It is agreed that the Contractor's insurance shall be deemed primary with respect to any insurance or self insurance carried by the Owner for liability arising out of operations under the Contract with the Owner.

5.2.3.3. The Owner, its officials, directors, employees, representatives, and volunteers are added as additional insureds as respects operations and activities of, or on behalf of the named insured performed under contract with the Owner. The additional insured status must cover completed operations as well. This is not applicable to the workers' compensation policy.

5.2.3.4. The workers' compensation and employers' liability policy will provide a waiver of subrogation in favor of the Owner.

5.2.4. Without limiting any of the other obligations or liabilities of the Contractor, the Contractor shall require each Subcontractor performing work under the Contract, at the Subcontractor's own expense, to maintain during the term of the Contract, the same stipulated minimum insurance including the required provisions and additional policy conditions as shown above. As an alternative, the Contractor may include its Subcontractors as additional insured on its own coverage as prescribed under these requirements. The Contractor's certificate of insurance shall note in such event that the Subcontractors are included as additional insured's and that Contractor agrees to provide Workers' Compensation for the Subcontractors and their employees. The Contractor shall obtain and monitor the certificates of insurance from each Subcontractor in order to

assure compliance with the insurance requirements. The Contractor must retain the certificates of insurance for the duration of the Contract plus 5 years and shall have the responsibility of enforcing these insurance requirements among its Subcontractors. The Owner shall be entitled, upon request and without expense, to receive copies of these certificates.

5.2.5. Workers' Compensation Insurance Coverage must meet the statutory requirements of the Tex. Lab. Code, §401.011(44) and specific to construction projects for public entities as required by Tex. Lab. Code, §406.096.

A. Definitions:

Certificate of coverage ("certificate")- A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

Duration of the project - includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("Subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent Contractors, Subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project.

C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

E. The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

(1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

(2) no later than seven days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

F. The Contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

G. The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

I. The Contractor shall contractually require each person with whom it contracts to provide services on a project, to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;

(2) provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

(3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(4) obtain from each other person with whom it contracts, and provide to the Contractor:

(a) a certificate of coverage, prior to the other person beginning work on the project; and

(b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

(6) notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

(7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the Contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the Contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

K. The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

Article 6. Contract Documents

6.1. Drawings and Specifications

6.1.1 Copies Furnished. The Contractor will be furnished, free of charge, the number of complete sets of the Drawings and Specifications as provided in the Supplementary General Conditions or Special Conditions. Additional complete sets of Drawings and Specifications, if requested, will be furnished at reproduction cost to the one requesting such additional sets.

6.1.2 Ownership of Drawings and Specifications. All Drawings, Specifications and copies thereof furnished by the AE are to remain A/E's property. These documents are not to be used on any other project, and with the exception of one Contract set for each party to the Contract, are to be returned to the Architect/Engineer, upon request, following completion of the Work.

6.1.3 Interrelation of Documents. The Contract Documents as referenced in the Agreement between the Owner and the Contractor are complimentary, and what is required by one shall be as binding as if required by all.

6.1.4 Resolution of Conflicts in Documents. Where conflicts may exist between and/or within the Contract Documents, the higher quality, greater quantity, more restrictive, and/or more expensive requirement shall be **required**. The Contractor shall notify the AE and the ODR **of any conflict before** executing the work in question.

6.1.5 Contractor's Duty to Review Contract Documents. In order to facilitate its responsibilities for completion of the Work in accordance with and as reasonably inferable from the Contract Documents, prior to pricing or commencing the Work, the Contractor shall examine and compare the Contract Documents, information furnished by the Owner, relevant field measurements made by the Contractor and any visible or reasonably anticipated conditions at the site affecting the Work. This duty extends throughout the construction phase prior to commencing each particular work activity and/or installation.

6.1.6 Discrepancies and Omissions in Drawings and Specifications

6.1.6.1 ***The Owner does not warrant or make any representations as to the accuracy or completeness of the information furnished to the Contractor by the Owner.*** The Contractor shall promptly report to the ODR and to the AE the discovery of any apparent error, omission or inconsistency in the Contract Documents prior to execution of the Work.

6.1.6.2 It is recognized that the Contractor is not acting in the capacity of a licensed design professional, unless it is performing as a Design-Build firm.

6.1.6.3 It is further recognized that the Contractor's examination of contract documents is to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies or to ascertain compliance with applicable laws, building codes or regulations, unless it is performing as a Design-Build firm or a Contractor.

6.1.6.4 When performing as a Design-Build firm, the Contractor has sole responsibility for discrepancies, errors, and omissions in the drawings and specifications.

6.1.6.5 When performing as a Contractor, the Contractor has a shared responsibility for discovery and resolution of discrepancies, errors, and omissions in the Contract Documents. In such case, the Contractor's responsibility pertains to review, coordination, and recommendation of resolution strategies within budget constraints, but does not establish a liability for design.

6.1.6.6 The Contractor has no liability for errors, omissions, or inconsistencies unless the Contractor knowingly failed to report a recognized problem to the Owner or the Work is executed under a Design-Build or Contractor contract as outlined above. Should the Contractor fail to perform the examination and reporting obligations of these provisions, the Contractor is responsible for avoidable costs, direct, and/or consequential damages.

6.2 Requirements for Record Documents

Maintain at the Site one copy of all Drawings, Specifications, addenda, approved Submittals, Contract modifications, and all Project correspondence. Keep current and maintain Drawings and Specifications in good order with postings and markings to record actual conditions of Work and show and reference all changes made during construction. Provide Owner and AE access to these documents.

6.2.1 Maintain this record set of Drawings and Specifications which reflect the "As Constructed" conditions and representations of the Work performed, whether it be directed by addendum, Change Order or otherwise. Make available all records prescribed herein for reference and examination by the Owner and its representatives and agents.

6.2.2 Update the "As-Constructed" Drawings and Specifications monthly prior to submission of periodic partial pay estimates. Failure to maintain such records constitutes cause for denial of a progress payment otherwise due.

6.2.3 Prior to requesting Substantial Completion Inspection by the ODR and AE, furnish a complete set of the marked up "As-Constructed" set maintained at the site and one photocopy of same. Concurrently with furnishing these record drawings, furnish a preliminary copy of each operating and maintenance manual (O&M) required by the Contract Documents, for review by the AE and the ODR.

6.2.4 Once determined acceptable, provide mylar prints of professionally drafted "As-Constructed" drawings, along with electronic copy on CD, "As-Constructed" specifications in bound volume(s) along with electronic copy on CD, two sets of photocopies or prints of the mylar "As-Constructed" drawings, two sets of operating and maintenance manuals, two sets of approved submittals, and other record documents as required elsewhere in the Contract Documents. **All electronic copies shall be provided in a format acceptable to the ODR.**

Article 7. Construction Safety

7.1. General. It is the duty and responsibility of the Contractor and all of its Subcontractors to be familiar with, enforce and comply with all requirements of Public Law 91-596, 29

U.S.C. §§651 et. seq., the Occupational Safety and Health Act of 1970, (OSHA) and all amendments thereto. The Contractor shall prepare a Safety Plan specific to the Project and submit it to the ODR and AE prior to commencing Work. In addition, the Contractor and all of its Subcontractors shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property to protect them from damage, injury or loss and erect and maintain all necessary

7.2. Notices. The Contractor shall provide notices as follows:

7.2.1 Notify owners of adjacent property including those that own or operate utility services and/or underground facilities, and utility owners, when prosecution of the Work may affect them or their facilities, and cooperate with them in the protection, removal, relocation and replacement, and access to their facilities and/or utilities.

7.2.2 Coordinate the exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in connection with laws and regulations. Maintain a complete file of MSDS for all materials in use on site throughout the construction phase and make such file available to the Owner and its agents as requested.

7.3. Emergencies. In any emergency affecting the safety of persons or property, the Contractor shall act to minimize, mitigate, and prevent threatened damage, injury or loss.

7.3.1 Have authorized agents of Contractor respond immediately upon call at any time of day or night when circumstances warrant the presence of Contractor to protect the Work or adjacent property from damage or to take such action pertaining to the Work as may be necessary to provide for the safety of the public.

7.3.2 Give the ODR and AE prompt notice of all such events.

7.3.3 If Contractor believes that any changes in the Work or variations from Contract Documents have been caused by its emergency response, promptly notify the Owner within 72 hours of the emergency response event.

7.3.4 Should Contractor fail to respond, Owner is authorized to direct other forces to take action as necessary and Owner may deduct any cost of remedial action from funds otherwise due the Contractor.

7.4. Injuries. In the event of an incident or accident involving outside medical care for an individual on or near the Work, Contractor shall notify the ODR and other parties as may be directed within twenty-four (24) hours of the event.

7.4.1 Record the location of the event and the circumstances surrounding it, by using photography or other means, and gather witness statements and other documentation which describes the event.

7.4.2 Supply the ODR and AE with an incident report no later than 36 hours after the occurrence of the event. In the event of a catastrophic incident (one fatality or three workers hospitalized), barricade and leave intact the scene of the incident until all investigations are complete. A full set of incident investigation documents, including

facts, finding of cause, and remedial plans shall be provided within one week after occurrence, unless otherwise directed by legal counsel. Contractor shall provide the ODR with written notification within one week of such catastrophic event if legal counsel delays submission of full report.

7.5. Environmental Safety. Upon encountering any previously unknown potentially hazardous material, or other materials potentially contaminated by hazardous material, Contractor shall immediately stop work activities impacted by the discovery, secure the affected area, and notify the ODR immediately.

7.5.1 Bind all Subcontractors to the same duty.

7.5.2 Upon receiving such notice, the ODR will promptly engage qualified experts to make such investigations and conduct such tests as may be reasonably necessary to determine the existence or extent of any environmental hazard. Upon completion of this investigation, the ODR will issue a written report to the Contractor identifying the material(s) found and indicate any necessary steps to be taken to treat, handle, transport or dispose of the material.

7.5.3 The Owner may hire third-party Contractors to perform any or all such steps.

7.5.4 Should compliance with the ODR's instructions result in an increase in the Contractor's cost of performance, or delay the Work, the Owner will make an equitable adjustment to the Contract price and/or the time of completion, and modify the Contract in writing accordingly.

7.6. Trenching Plan. When the project requires excavation which either exceeds a depth of four feet, or results in any worker's upper body being positioned below grade level, the Contractor is required to submit a trenching plan to the ODR prior to commencing trenching operations. The plan is required to be prepared and sealed by a professional engineer registered in the State of Texas, and employed by the Contractor. Said engineer cannot be anyone who is otherwise either directly or indirectly engaged on this project.

Article 8. Quality Control

8.1. Materials & Workmanship. The Contractor shall execute Work in a good and workmanlike manner in accordance with the Contract Documents. The Contractor shall develop and provide a Quality Control Plan specific to this project and acceptable to the Owner. Where Contract Documents do not specify quality standards, complete and construct all Work in compliance with generally accepted construction industry standards. Unless otherwise specified, incorporate all new materials and equipment into the Work under the Contract.

8.2. Testing

8.2.1 Contractor Testing. The Contractor is responsible for coordinating and paying for all routine and special tests required to confirm compliance with quality and performance requirements of the Contract Documents. This "quality control" testing shall include any particular testing required by the Specifications and the following general tests.

8.2.1.1. Any test of basic material or fabricated equipment included as part of a submittal for a required item in order to establish compliance with the Contract Documents.

8.2.1.2 Any test of basic material or fabricated equipment offered as a substitute for a specified item on which a test may be required in order to establish compliance with the Contract Documents.

8.2.1.3 Routine, preliminary, start-up, pre-functional and operational testing of building equipment and s as necessary to confirm operational compliance with requirements of the Contract Documents.

8.2.1.4 All subsequent tests on original or replaced materials conducted as a result of prior testing failure.

8.2.2 Owner Testing. The Owner reserves the right to subject materials and s incorporated into the Project to routine tests as may be specified or as deemed necessary by the ODR or the AE to ensure compliance with the quality and/or performance requirements of the Contract Documents and/or with laws, ordinances, rules, regulations and/or orders of any public authority having jurisdiction. The results of such "quality assurance" testing will be provided to the Contractor and, to the extent provided, the Contractor may rely on findings.

8.2.3 All testing shall be performed in accordance with standard test procedures by an accredited laboratory, or special consultant as appropriate, acceptable to the Owner. Results of all tests shall be provided promptly to the ODR, Architect/Engineer and the Contractor.

8.2.4 Non-Compliance (Test Results). Should any of the tests indicate that a material and/or does not comply with the contract requirements, the burden of proof remains with the Contractor, subject to:

8.2.4.1 Contractor selection and submission of the laboratory for Owner acceptance.

8.2.4.2 Acceptance by the Owner of the quality and nature of tests.

8.2.4.3 All tests taken in the presence of the Architect/Engineer and/or ODR, or their representatives.

8.2.4.4 If tests confirm that the material/s comply with Contract Documents, the Owner will pay the cost of the test.

8.2.4.5 If tests reveal noncompliance, the Contractor will pay those laboratory fees and costs of that particular test and all future tests, of that failing Work, necessary to eventually confirm compliance with Contract Documents.

8.2.4.6 Proof of noncompliance with the Contract Documents will make the Contractor liable for any corrective action which the ODR determines appropriate, including complete removal and replacement of noncompliant work or material.

8.2.5 Notice of Testing. The Contractor shall give the ODR and the AE timely notice of its readiness and the date arranged so the ODR and AE may observe such inspection, testing or approval.

8.2.6 Test Samples. The Contractor is responsible for providing samples of sufficient size for test purposes and for coordinating such tests with their Work Progress Schedule to avoid delay.

8.2.7 Covering Up Work - If the Contractor covers up any Work without providing the Owner an opportunity to inspect, the Contractor shall, if requested by ODR, uncover and recover the work at Contractor's expense.

8.3 Submittals

8.3.1 Contractor's Submittals. Submit with reasonable promptness consistent with the Project Schedule and in orderly sequence all Shop Drawings, Samples, or other information required by the Contract Documents, or subsequently required by Change Order. Prior to submitting, the Contractor shall review each submittal for compliance with Contract Documents and certify by approval stamp affixed to each copy. Submittal data presented without the Contractor's certification will be returned without review or comment, and any delay resulting from such certification is the Contractor's responsibility.

8.3.1.1 Within twenty-one (21) calendar days of the effective date of the Notice To Proceed with construction, submit to the ODR, and the AE, a submittal schedule/register, organized by specification section, listing all items to be furnished for review and approval by the Architect/Engineer and Owner. The list shall include shop drawings, manufacturer's literature, certificates of compliance, materials samples, materials colors, guarantees, and all other items identified throughout the specifications.

8.3.1.2 Indicate the type of item, contract requirements reference, and Contractor's scheduled dates for submitting the item along with the requested dates for approval answers from the Architect/Engineer and Owner. The submittal register shall indicate the projected dates for procurement of all included items and shall be updated at least monthly with actual approval and procurement dates. Show and allow a minimum of thirty (30) calendar days duration after receipt by the Architect/Engineer and ODR for review and approval. If re-submittal is required, allow a minimum of an additional fifteen (15) calendar days for review. Submit the updated submittal register with each request for progress payment. The Owner may establish routine review procedures and schedules for submittals at the preconstruction conference and/or elsewhere in the Contract Documents. ***Failure to update and provide the submittal schedule/register as required shall constitute cause for Owner to withhold payment otherwise due.***

8.3.1.3 Coordinate the submittal register with the Work Progress Schedule. Do not schedule Work requiring a submittal to begin prior to scheduling review and approval of the related submittal. Revise and/or update both schedules monthly to ensure consistency and current project data. Provide to the ODR the updated submittal register and schedule with each application for progress payment. Refer to requirements for the Work Progress Schedule for inclusion of procurement activities therein. Regardless, the submittal register shall identify dates submitted and returned and shall be used to confirm status and disposition of particular items submitted, including approval or other action taken and other information not conveniently tracked through the Work Progress Schedule.

8.3.1.4 By submitting Shop Drawings, Samples or other required information, the Contractor represents and certifies that they have determined and verified all applicable field measurements, field construction criteria, materials, catalog numbers and similar data; and has checked and coordinated each Shop Drawing and Sample with the requirements of the Work and the Contract Documents.

8.3.2 Review of Submittals. AE and ODR review is only for conformance with the design concept and the information provided in the Contract Documents. Responses to submittals will be in writing. The approval of a separate item does not indicate approval

of an assembly in which the item functions. The approval of a submittal does not relieve the Contractor of responsibility for any deviation from the requirements of the Contract unless the Contractor informs the AE and ODR of such deviation in a clear, conspicuous, and written manner on the submittal transmittal and at the time of submission, and obtains the Owner's written specific approval of the particular deviation.

8.3.3 Correction and Resubmission. Make any corrections required to a submittal and resubmit the required number of corrected copies promptly so as to avoid delay, until submittal approval. Direct attention in writing to the AE and the ODR, when applicable, to any new revisions other than the corrections requested on previous submissions.

8.3.4 Limits on Shop Drawing Approvals. The Contractor shall not commence any Work requiring a submittal until approval of the submittal. Construct all such work in accordance with approved submittals. Approval of Shop Drawings and Samples is not authorization to Contractor to perform extra work or changed work unless authorized through a Change Order. The AE's and ODR's approval, if any, does not relieve Contractor from responsibility for defects in the Work resulting from errors or omissions of any kind on the submittal, regardless of any approval action.

8.3.5 No Substitutions Without Approval. The ODR and the AE may receive and consider the Contractor's request for substitution when the Contractor agrees to reimburse the Owner for review costs and satisfies 8.3.5.1, 8.3.5.2, and 8.3.5.3 in combination with one or more of the items in 8.3.5.4 through 8.3.5.11 of the following conditions, as determined by the Owner. If the Contractor does not satisfy these conditions, the ODR and AE will return the request without action except to record noncompliance with these requirements. The Owner will not consider the request if the Contractor cannot provide the product or method because of failure to pursue the Work promptly or coordinate activities properly.

8.3.5.1 The Contract Documents do not require extensive revisions.

8.3.5.2 Proposed changes are in keeping with the general intent of the Contract Documents and the design intent of the AE and do not result in an increase in cost to the Owner.

8.3.5.3 The request is timely, fully documented, and properly submitted.

8.3.5.4 The Contractor cannot provide the specified product, assembly or method of construction within the Contract Time.

8.3.5.5 The request directly relates to an "or-equal" clause or similar language in the Contract Documents.

8.3.5.6 The request directly relates to a "product design standard" or "performance standard" clause in the Contract Documents.

8.3.5.7 The requested substitution offers the Owner a substantial advantage in cost, time, energy conservation or other considerations, after deducting additional responsibilities the Owner must assume.

8.3.5.8 The specified product or method of construction cannot receive necessary approval by an authority having jurisdiction, and the ODR can approve the requested substitution.

8.3.5.9 The Contractor cannot provide the specified product, assembly or method of construction in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.

8.3.6 Unauthorized Substitutions at Contractor's Risk. The Contractor is financially responsible for any additional costs or delays resulting from using materials, equipment or fixtures other than those specified. The Contractor shall reimburse the Owner for any increased design or contract administration costs resulting from such unauthorized substitutions.

8.4 Field Mock-up

8.4.1 Mockups shall be constructed prior to commencement of a specified scope of work to confirm acceptable workmanship.

8.4.1.1 As a minimum, field mock-ups shall be constructed for roofing s, exterior veneer / finishes, glazing, and any other Work requiring a mock-up as identified throughout the Contract Documents. Mockups for s not part of the project scope shall not be required.

8.4.1.2 Mock-ups may be incorporated into the Work if allowed by the Contract Documents and if acceptable to the ODR. If mock-ups are freestanding, they shall remain in place until otherwise directed by the Owner.

8.4.1.3 The Contractor shall include field mock-ups in their Work Progress Schedule and shall notify the ODR and Architect/Engineer of readiness for review sufficiently in advance to coordinate review without delay.

8.5 Inspection During Construction

8.5.1 The Contractor shall provide sufficient, safe, and proper facilities, including equipment as necessary for safe access, at all reasonable times for observation and/or inspection of the Work by the Owner and its agents.

8.5.2 The Contractor shall not cover up any work with finishing materials or other building components prior to providing the Owner and its agents an opportunity to perform an inspection of the Work.

8.5.2.1 Should corrections of the Work be required for approval, do not cover up corrected Work until the Owner indicates approval.

8.5.2.2 Provide notification of at least five (5) working days or otherwise as mutually agreed, to the ODR of the anticipated need for a cover up inspection. Should the ODR fail to make the necessary inspection within the agreed period, the Contractor may proceed with cover up Work, but is not relieved of responsibility for Work to comply with requirements of the Contract Documents.

Article 9. Project Scheduling Requirements

9.1. Contract Time. TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT. The Contract Time is the time between the dates indicated in the Notice to Proceed for commencement of the Work and for achieving Substantial Completion and Final Completion. The Contract Time can be modified only by Change Order. Failure to achieve Substantial Completion within the Contract Time, Final Completion within thirty (30) days Following Substantial Completion or otherwise agreed to in writing will cause damage to

to the Owner and may subject the Contractor to Liquidated Damages as provided in the Contract Documents.

9.2. Notice to Proceed. The Owner will issue a Notice to Proceed which shall state the dates for beginning Work and for achieving Substantial Completion and Final Completion of the Work.

9.3. Work Progress Schedule. Refer to Special Conditions and Division 1 General Administration Specifications for additional schedule requirements. ***This Article pertains to construction phase schedules. Additional requirements for design phase scheduling for Contractor and Design Build contracts are outlined in Division 1 Project Planning and Scheduling Specification.*** Unless indicated otherwise in those documents, Contractor shall submit their initial Work Progress Schedule for the Work in relation to the entire Project not later than twenty-one (21) days after the effective date of the Notice to Proceed to the ODR and the AE. Unless otherwise indicated in the Contract Documents, the Work Progress Schedule shall be computerized Critical Path Method (CPM) with full reporting capability. This initial schedule shall indicate the dates for starting and completing the various aspects required to complete the Work, including mobilization, procurement, installation, testing, inspection, and acceptance of all the Work of the Contract. When acceptable to the Owner, the initially accepted schedule shall be the Baseline Schedule for comparison to actual conditions throughout the contract duration.

9.3.1 Schedule Requirements. Submit electronic and paper copy of the initial Work Progress Schedule reflecting accurate and reliable representations of the planned progress of the Work, the Work to date if any, and of the Contractor's actual plans for its completion. Organize and provide adequate detail so the Schedule is capable of measuring and forecasting the effect of delaying events on completed and uncompleted activities.

9.3.1.1 Re-submit initial Schedule as required to address review comments from AE and ODR until such Schedule is accepted as the Baseline Schedule.

9.3.1.2 Submittal of a schedule, schedule revision or schedule update constitutes the Contractor's representation to the Owner of the accurate depiction of all progress to date and that the Contractor will follow the schedule as submitted in performing the Work.

9.3.2 Schedule Updates. Update the Work Progress Schedule and the Submittal Schedule monthly, as a minimum, to reflect progress to date and current plans for completing the Work, and submit paper and electronic copy of the update to the AE and ODR as directed. The Owner has no duty to make progress payments unless accompanied by the updated Work Progress Schedule. Show the anticipated date of completion reflecting all extensions of time granted through Change Order as of the date of the update. The Contractor may revise the Progress Schedule logic only with the Owner's concurrence when in the Contractor's judgment it becomes necessary for the management of the Work. Identify all proposed changes to schedule logic to Owner and to the AE via an Executive Summary accompanying the updated schedule for review prior to implementation of revisions.

9.3.3 The Work Progress Schedule is for the Contractor's use in managing the Work and submittal of the Schedule, and successive updates or revisions, is for the information of the Owner and to demonstrate that the Contractor has complied with requirements for planning the Work. The Owner's acceptance of a schedule, schedule update or revision constitutes the Owner's agreement to coordinate its own activities with the Contractor's activities as shown on the schedule.

9.3.3.1 Acceptance of the Work Progress Schedule, or update and/or revision thereto does not indicate any approval of the Contractor's proposed sequences and duration.

9.3.3.2 Acceptance of a Work Progress Schedule update or revision indicating early or late completion does not constitute the Owner's consent, alter the terms of the Contract, or waive either the Contractor's responsibility for timely completion or the Owner's right to damages for the Contractor's failure to do so.

9.3.3.3 The Contractor's scheduled dates for completion of any activity or the entire Work do not constitute a change in terms of the contract. Change Orders are the only method of modifying the completion Date(s) and Contract time.

9.4. Ownership of Float. Unless indicated otherwise in the Contract Documents, the Contractor shall develop the schedule and their execution plan to provide a minimum of 10 percent total float at the project level at acceptance of the Baseline Schedule. Float time contained in the Work Progress Schedule is not for the exclusive benefit of the Contractor or the Owner, but belongs to the Project and may be consumed by either party as needed on a first-used basis.

9.5. Completion of Work. The Contractor is accountable for completing the Work in the time stated in the Contract, or as otherwise amended by Change Order.

9.5.1 If, in the judgment of the Owner, the work is behind schedule and the rate of placement of work is inadequate to regain scheduled progress to insure timely completion of the entire work or a separable portion thereof, the Contractor, when so informed by the Owner, shall immediately take action to increase the rate of work placement by:

9.5.1.1 An increase in working forces.

9.5.1.2 An increase in equipment or tools.

9.5.1.3 An increase in hours of work or number of shifts.

9.5.1.4 Expedite delivery of materials.

9.5.1.5 Other action proposed if acceptable to Owner.

9.5.2 Within ten (10) calendar days after such notice from the ODR, the Contractor shall notify the ODR in writing of the specific measures taken and/or planned to increase the rate of progress. Include an estimate as to the date of scheduled progress recovery and an updated Work Progress Schedule illustrating the Contractor's plan for achieving timely completion of the project. Should the ODR deem the plan of action inadequate, take additional steps or make adjustments as necessary to its plan of action until it meets with the ODR's approval.

9.6 Modification of the Contract Time

9.6.1 Delays and extension of time as hereinafter described are valid only if executed in accordance with provisions set forth in Article 11.

9.6.2 When a delay defined herein as excusable prevents the Contractor from completing the Work within the Contract Time, the Contractor is entitled to an extension of time. The Owner will make an equitable adjustment and extend the number of calendar days lost because of excusable delay, as measured by the Contractor's progress schedule. All extensions of time will be granted in calendar days. In no event, however,

will an extension of time be granted for delays that merely extend the duration of non-critical activities, or which only consume float without delaying the project completion date.

9.6.2.1 "A Weather Day" is a day on which the Contractor's current schedule indicates Work is to be done, and on which inclement weather and related site conditions prevent the Contractor from performing seven continuous hours of Work between the hours of 7:00 a.m. and 6:00 p.m. Weather days are excusable delays. When weather conditions at the site prevent work from proceeding, immediately notify the ODR for confirmation of the conditions. At the end of each calendar month, submit to the ODR and AE a list of Weather Days occurring in that month along with documentation of the impact on critical activities. Based on confirmation by the ODR, any time extension granted will be issued by Change Order. If the Contractor and Owner cannot agree on the time extension, the Owner may issue a ULCO for fair and reasonable time extension.

9.6.2.2 Excusable Delay. The Contractor is entitled to an equitable adjustment of time, issued via change order, for delays caused by the following:

9.6.2.2.1 Errors, omissions and imperfections in design which the AE corrects by means of changes in the drawings and specifications.

9.6.2.2.2 Unanticipated physical conditions at the Site which the AE corrects by means of changes to the drawings and specifications or for which the ODR directs changes in the Work identified in the Contract Documents.

9.6.2.2.3 Changes in the Work that effect activities identified in the Contractor's schedule as "critical" to completion of the entire Work, if such changes are ordered by the ODR or the AE.

9.6.2.2.4 Suspension of Work for unexpected natural events (sometimes called "acts of God"), civil unrest, strikes or other events which are not within the reasonable control of the Contractor.

9.6.2.2.5 Suspension of Work for convenience of the ODR, which prevents Contractor from completing the Work within the Contract Time.

9.6.3 The Contractor's relief in the event of such delays is the time impact to the critical path as determined by analysis of the Contractor's schedule. In the event that the Contractor incurs additional direct costs because of the delay, they are to be determined pursuant to the provisions of Article 11.

9.7 **No Damages for Delay. The Contractor has no claim for monetary damages for delay or hindrances to the work from any cause except when the delay is solely caused by the Owner.**

9.8 Concurrent Delay. When the completion of the Work is simultaneously delayed by an excusable delay and a delay arising from a cause not designated as excusable, the Contractor may not be entitled to a time extension for the period of concurrent delay

9.9 Other Time Extension Requests. Time extensions requested in association with changes to the Work directed or requested by the Owner shall be included with the Contractor's proposed costs for such change. Time extensions requested for inclement weather are covered by paragraph 9.6.2.1 above. If the Contractor believes that the completion of the Work is delayed by a circumstance other than for changes directed to the Work or weather, they shall give the ODR written notice, stating the nature of the delay and the activities potentially affected, within five (5) calendar days after the onset of the event or circumstance giving rise to the excusable delay. Provide sufficient written evidence to

document the delay. In the case of a continuing cause of delay, only one **notice of delay** is necessary. State claims for extensions of time in numbers of whole or half calendar days.

9.9.1 Within ten (10) calendar days after the cessation of the delay, the Contractor shall formalize its request for extension of time in writing to include a full analysis of the schedule impact of the delay and substantiation of the excusable nature of the delay. All Changes to the Contract Time or made as a result of such claims is by Change Order, as set forth in Article 11.

9.9.2 No extension of time releases the Contractor or the Surety furnishing a performance or payment bond from any obligations under the contract or such a bond. Those obligations remain in full force until the discharge of the Contract.

9.9.3 Contents of Time Extension Requests. Provide with each Time Extension Request a quantitative demonstration of the impact of the delay on project completion time, based on the Work Progress Schedule. Include with Time Extension Requests a reasonably detailed narrative setting forth:

9.9.3.1 The nature of the delay and its cause; the basis of the Contractor's claim of entitlement to a time extension.

9.9.3.2 Documentation of the actual impacts of the claimed delay on the critical path indicated in the Contractor's Work Progress Schedule, and any concurrent delays.

9.9.3.3 Description and documentation of steps taken by the Contractor to mitigate the effect of the claimed delay, including, when appropriate, the modification of the Work Progress Schedule.

9.9.4 Owner's Response. The Owner will respond to the Time Extension Request by providing to the Contractor written notice of the number of days granted, if any, and giving its reason if this number differs from the number of days requested by the Contractor.

9.9.4.1 The Owner will not grant time extensions for delays that do not affect the Contract Completion Date.

9.9.4.2 The Owner will respond to each properly submitted Time Extension Request within fifteen (15) calendar days following receipt. If the Owner cannot reasonably make a determination about the Contractor's entitlement to a time extension within that time, the Owner will notify the Contractor in writing. Unless otherwise agreed by the Contractor, the Owner has no more than fifteen (15) additional calendar days to prepare a final response. If the Owner fails to respond within forty-five (45) calendar days from the date the Time Extension Request is received, the Contractor is entitled to a time extension in the amount requested.

9.10 Failure to Complete Work Within the Contract Time. **TIME IS OF THE ESSENCE OF THIS CONTRACT.** The Contractor's failure to substantially complete the Work within the Contract Time or to achieve final completion as required will cause damage to the Owner. These damages may be liquidated by agreement of the Contractor and the Owner, as set forth in the Contract Documents.

9.11 Liquidated Damages. The Owner may collect Liquidated Damages due from the Contractor directly or indirectly by reducing the contract sum in the amount of Liquidated Damages stated in the Contract Documents.

Article 10. Payments

10.1. Schedule of Values. The Contractor shall submit to the ODR and the AE for acceptance a Schedule of Values, or Work Breakdown, accurately itemizing material and labor for the various classifications of the Work based on the organization of the specification sections and using the same activity names and terms as the Work Progress Schedule. The accepted Schedule of Values will be the basis for the progress payments under the Contract.

10.1.1 No progress payments will be made prior to receipt and acceptance of the Schedule of Values, provided in such detail as required by the ODR, and submitted not less than twenty-one calendar (21) days prior to the first request for payment. The Schedule of Values shall follow the order of trade divisions of the specifications and include costs for general conditions, fees, contingencies, and Owner cash allowances, if applicable, so that the sum of the items will equal the contract price. As appropriate, assign each item labor and/or material values, the subtotal thereof equaling the value of the work in place when complete.

10.1.2 The Contractor shall retain a copy of all worksheets used in preparation of its bid or proposal, supported by a notarized statement that the worksheets are true and complete copies of the documents used to prepare the bid or proposal. Make the worksheets available to the ODR at the time of Contract execution. Thereafter grant the Owner during normal business hours access to said notarized copy of worksheets at any time during the period commencing upon execution of the Contract and ending one year after final payment.

10.2. Progress Payments. The Contractor will receive periodic progress payments for Work performed, materials in place, suitably stored on site, or as otherwise agreed to by the Owner and the Contractor. Payment is not due until receipt by the ODR or his designee of a correct and complete Pay Application in electronic and/or hard copy format as set forth in Supplementary General Conditions, Special Conditions or Division 1 Specifications, and certified by the AE. Progress payments are made provisionally and do not constitute acceptance of work not in accordance with the Contract Documents. The Owner will not process progress payment applications for Change Order work until all parties execute the Change Order.

10.2.1 Preliminary Pay Worksheet once each month that a progress payment is to be requested, the Contractor shall submit to the Architect/Engineer and the ODR a complete, clean copy of a preliminary pay worksheet or Preliminary Pay Application, to include the following:

10.2.1.1 The Contractor estimate of the amount of Work performed, labor furnished and materials incorporated into the Work, using the established Schedule of Values.

10.2.1.2 An updated Work Progress Schedule including the Executive Summary and all required schedule reports.

10.2.1.3 SB Subcontracting Plan reports.

10.2.1.4 Such additional documentation as Owner may require as set forth in the Supplementary General Conditions or elsewhere in the Contract Documents.

10.2.2 Contractor's Application for Progress Payment. As soon as practicable, but in no event later than seven days after receipt of the Preliminary Pay Worksheet, the AE and ODR will meet with the Contractor to review the Preliminary Pay Worksheet and to observe the condition of the Work. Based on this review, the ODR and the AE may require modifications to the Preliminary Pay Worksheet prior to the submittal of an application for progress payment, and will promptly notify the Contractor of revisions necessary for approval. As soon as practicable, the Contractor shall submit its Invoice on

the appropriate and completed form, reflecting the required modifications to the Schedule of Values required by the AE and/or ODR. Attach all additional documentation required by the ODR and/or AE, as well as an affidavit affirming that all payrolls, bills for labor, materials, equipment, subcontracted work and other indebtedness connected with the Contractor's invoice are paid or will be paid within the time specified in Tex. Gov't Code, Chapter 2251. No invoice is complete unless it fully reflects all required modifications, and attaches all required documentation including the Contractor's affidavit.

10.2.3 Certification by Architect/Engineer. Within five days or earlier following the AE's receipt of the Contractor's formal invoice, the AE will review the application for progress payment for completeness, and forward to the ODR. The AE will certify that the application is complete and payable, or that it is incomplete, stating in particular what is missing. If the Invoice is incomplete, the Contractor shall make the required corrections and resubmit the Invoice for processing.

10.3 Owner's Duty to Pay. The Owner has no duty to pay the Contractor except on receipt by the ODR of; 1) a complete Invoice certified by the AE and 2) the Contractor's updated Work Progress Schedule, and 3) confirmation that the Contractor's as-built documentation at the site is kept current.

10.3.1 Payment for stored materials and/or equipment confirmed by the Owner and AE to be on-site or otherwise properly stored may be limited to 85 percent of the invoice price or 85 percent of the scheduled value for the materials or equipment, whichever is less.

10.3.2 Retainage. The Owner will withhold from each progress payment, as retainage, 5 percent of the total earned amount, the amount authorized by law, or as otherwise set forth in the Supplementary General Conditions. Retainage is managed in conformance with Tex. Gov't Code, Chapter 2252, Government Code, subchapter B.

10.3.2.1 The Contractor shall provide written consent of its Surety for any request for reduction or release of retainage.

10.3.2.2 At least sixty-five (65) percent of the total Contract must be completed before the Owner can consider a retainage reduction or release.

10.3.3 Price Reduction to Cover Loss. The Owner may reduce any Periodic Invoice, or application for Progress Payment, prior to payment to the extent necessary to protect the Owner from loss on account of actions of the Contractor including, but not limited to:

10.3.3.1 Defective or incomplete Work not remedied.

10.3.3.2 Damage to Work of a separate Contractor.

10.3.3.3 Failure to maintain scheduled progress or reasonable evidence that the Work will not be completed within the Contract Time.

10.3.3.4 Persistent failure to carry out the Work in accordance with the Contract Documents.

10.3.3.5 Reasonable evidence that the Work cannot be completed for the unpaid portion of the contract sum.

10.3.3.6 Assessment of fines for violations of Prevailing Wage Rate law; or

10.3.3.7 Failure to include the appropriate amount of retainage for that periodic progress payment.

10.3.4 Title to all material and Work covered by progress payments transfers to the Owner upon payment.

10.3.4.1 Transfer of title to Owner does not relieve the Contractor of the sole responsibility for the care and protection of materials and Work upon which payments have been made until final acceptance of the entire Work, or the restoration of any damaged Work, or waive the right of the Owner to require the fulfillment of all the terms of the Contract.

10.4 Progress payments to the Contractor do not release the Contractor or its surety from any obligations under this Contract.

10.4.1 Upon the Owner's request, the Contractor shall furnish proof of the status of Subcontractor's accounts in a form acceptable to the Owner.

10.4.2 Pay estimate certificates must be signed by a corporate officer or a representative duly authorized by the Contractor.

10.4.3 Provide copies of bills of lading, invoices, delivery receipts or other evidence of the location and value of such materials in requesting payment for materials.

10.4.4 For purposes of Tex. Gov't Code § 2251.021 (a) (2), the date the performance of service is complete is the date when the Owner's representative approves the application for payment.

10.5 Off-Site Storage. With prior approval by the Owner and in the event Contractor elects to store materials at an off-site location, abide by the following conditions, unless otherwise agreed to in writing by the Owner.

10.5.1 Store materials in a Bonded Commercial Warehouse.

10.5.2 Provide separate Insurance Coverage adequate not only to cover materials while in storage, but also in transit from the off-site storage areas to the project site. Copies of duly authenticated Certificates of Insurance, made out to insure the State Agency which is signatory to the contract, must be filed with the Owner's representative.

10.5.3 Inspection by Owner's representative is allowed at any time. The Owner's Inspectors must be satisfied with the security, control, maintenance, and preservation measures.

10.5.4 Materials for this project are physically separated and marked for the project in a sectioned-off area. Only materials which have been approved through the submittal process are to be considered for payment.

10.5.5 Owner reserves the right to reject materials at any time prior to final acceptance of the complete Contract if they do not meet Contract requirements regardless of any previous progress payment made.

10.5.6 With each monthly payment estimate, submit a report to the ODR, AE, and Inspector listing the quantities of materials already paid for and still stored in the off-site location.

10.5.7 Make warehouse records, receipts and invoices available to Owner's representatives, upon request, to verify the quantities and their disposition.

10.5.8 In the event of Contract termination or default by Contractor, the items in storage off-site, upon which payment has been made, will be promptly turned over to Owner or Owner's agents at a location near the jobsite as directed by the ODR. The full provisions of Performance and Payment Bonds on this project cover the materials off-site in every respect as though they were stored on the Project Site.

Article 11. Changes

11.1. Change Orders. A Change Order issued after execution of the Contract is a written order to the Contractor, signed by the ODR, the Contractor, and the Architect/Engineer, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time can only be changed by Change Order. A Change Order signed by the Contractor indicates his agreement with it, including the adjustment in the Contract Sum and/or the Contract Time. The ODR may issue written authorization for the Contractor to proceed with work of a change order in advance of final execution by all parties. ***In the absence of an agreement with the Contractor on a Change Order, the Owner may issue a Unilateral Change Order that will have the full force and effect of a contract modification. The issuance of a Unilateral Change Order does not prejudice the Contractor's rights to make claims or to appeal disputed matters under terms of the Contract.***

11.1.1 The Owner, without invalidating the Contract, ***and without approval of the Contractor's Surety***, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, and the Contract Sum and the Contract Time will be adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. If such changes cause an increase or decrease in the Contractor's cost of, or time required for, performance of the Contract, an equitable adjustment shall be made and confirmed in writing in a Change Order.

11.1.2 The parties acknowledge that the specifications and drawings may not be complete or free from errors, omissions or imperfections and that they may require changes or additions in order for the work to be completed to the satisfaction of Owner. Therefore, and notwithstanding any other provisions in this Contract, the parties agree that any errors, omissions or imperfections in the specifications and drawings, or any changes in or additions to them or to the work ordered by Owner and any resulting delays in the work or increases in Contractor's costs and expenses, shall not constitute or give rise to any claim, demand or cause of action of any nature whatsoever in favor of Contractor, whether for breach of contract, *quantum meruit*, or otherwise; provided, however, that Owner shall be liable to Contractor for the sum stated to be due Contractor in any Change Order approved and signed by both parties. The parties agree that the Change Order sum, together with any extension of time contained in the Change Order, shall constitute full compensation to Contractor for all costs, expenses and damages to Contractor, whether direct, consequential or otherwise that are incident to, arise out of, or result directly or indirectly from or indirectly from the work performed by Contractor under such Change Order.

11.1.3 Procedures for administration of Change Orders shall be established by the Owner and stated in Supplementary General Conditions, Special Conditions, or elsewhere in the Contract Documents.

11.1.4 Except as provided above, no order, oral statement, or direction of the Owner or his duly appointed representative shall be treated as a change under this article or entitle the Contractor to an adjustment.

11.1.5 The Contractor agrees that the Owner or any of its duly authorized representatives shall have access and the right to examine any directly pertinent books, documents, papers, and records of the Contractor. Further, the Contractor agrees to include in all its subcontracts a provision giving the Owner or any of its duly authorized representative's access to and the right to examine any directly pertinent books,

documents, papers and records of any Subcontractor relating to any claim arising from this Contract, whether or not the Subcontractor is a party to the claim. The right of access and examination described herein shall continue for the duration of any claims brought under the Disputes article of the Contract, litigation, or the settlement of claims arising out of the performance of this Contract until final disposition of such claims, appeals or litigation.

11.2. Unit Prices: The Contract Documents may require the Contractor to provide certain work or materials on the basis of unit prices. If the quantity originally contemplated in determining any unit price is **materially** changed such that application of the agreed unit price to the actual quantity of work required will cause substantial inequity to the Owner or the Contractor, the applicable unit price shall be equitably adjusted as provided in the Special Conditions or as agreed to by the parties and incorporated into Change Order.

11.3. Claims for Additional Costs

11.3.1 The Contractor shall provide written notice to the Owner and the Architect/Engineer within twenty-one (21) days of the occurrence of any event or the discovery of any condition that the Contractor claims will cause an increase in the Contract Sum or Contract Time that is not related to a requested change. The Contractor shall not proceed with any work for which it will assert a claim for additional cost or time before providing the written notices, except for emergency situations governed by Article 7.3. Failure to provide the required notices is sufficient grounds for rejecting any claim for an increase in the Contract Sum or the Contract Time arising from the event or the condition. Any adjustment in the Contract Sum or Contract Time for any additional Work shall be authorized by Change Order.

11.3.2 The notice provisions of Article 11.3.1 apply to, but are not limited to, any claims for additional cost or time brought by the Contractor as a result of: 1) any written interpretation of the Contract Documents, 2) any order by the Owner to stop the Work pursuant to Article 14 where the Contractor was not at fault, or 3) any written order for a minor change in the Work issued pursuant to Article 11.4.

11.3.3 Should the Contractor or his Subcontractors fail to call attention of the AE to obvious discrepancies or omissions in the Bid/Proposal Documents during the pre-bid/pre-proposal period, but claim additional costs for corrective work after contract award, the Owner may assume intent to circumvent competitive bidding for necessary corrective work. In such case, the Owner may choose to let a separate contract for the corrective work, or issue a Unilateral Change Order to require performance by the Contractor. Claims for time extensions or for extra cost resulting from delayed notice of contract document discrepancies or omissions will not be considered by the Owner.

11.4. Minor Changes. The AE, with concurrence of the ODR, will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time. Such changes shall be effected by written order which the Contractor shall carry out promptly and record on as-built record documents.

11.5. Concealed Site Conditions. If, in the performance of the Contract, subsurface, latent or concealed conditions at the site are found to be materially different from the information included in the bid/proposal documents, or if unknown conditions of an unusual nature are disclosed differing materially from the conditions usually inherent in work of the character shown and specified, the ODR and the Architect/Engineer shall be notified in writing of such conditions before they are disturbed. Upon such notice, or upon its own observation of such conditions, the Architect/Engineer, with the approval of the ODR, will promptly make such changes in the Drawings and Specifications as they deem necessary to

conform to the different conditions, and any increase or decrease in the cost of the Work, or in the time within which the Work is to be completed, resulting from such changes will be adjusted by Change Order, subject to the prior approval of the ODR.

11.6. Extension of Time. All Changes to the Contract Time shall be made as a consequence of requests as required under Article 9.6, and as documented by Change Order as provided under Article 11.1.

11.7. Administration of Change Order Requests

All changes in the Contract shall be administered in accordance with procedures approved by the Owner, and when required make use of such electronic information management (s) as the owner may employ.

11.7.1 Routine changes in the Construction Contract shall be formally initiated by the Architect/Engineer by means of a Change Request form detailing requirements of the proposed change for pricing by the Contractor. This action may be preceded by communications between the Contractor, AE and ODR concerning the need and nature of the change, but such communications shall not constitute a basis for beginning the proposed Work by the Contractor. Except for emergency conditions described below, approval of the Contractor's cost proposal by the Architect/Engineer and ODR will be required for authorization to proceed with the Work being changed. The Owner will not be responsible for the cost of work changed without prior approval and the Contractor may be required to remove work so installed.

11.7.2 Any unexpected circumstance which necessitates an immediate change in order to avoid a delay in progress of the Work may be expedited by verbal communication and authorization between the Contractor and Owner, with written confirmation following within twenty-four (24) hours. A limited scope not-to-exceed estimate of cost and time will be requested prior to authorizing Work to proceed. Should the estimate be impractical for any reason, the ODR may authorize the use of detailed cost records of such work to establish and confirm the actual costs and time for documentation in a formal Change Order.

11.7.3 Emergency changes to save life or property may be initiated by the Contractor alone (see Article 7.3) with the claimed cost and/or time of such work to be fully documented as to necessity and detail of the reported costs and/or time.

11.7.4 The method of incorporating approved changes into the parameters of the accepted Schedule of Values must be coordinated and administered in a manner acceptable to the ODR.

11.8. Pricing Change Order Work

11.8.1 All proposed costs for change order work must be supported by itemized accounting of material, equipment and associated itemized installation costs in sufficient detail, following the outline and organization of the established Schedule of Values, to permit analysis by the AE and ODR using current estimating guides and/or practices.

11.8.1.1 Photocopies of Subcontractor and vendor proposals shall be furnished unless specifically waived by the ODR.

11.8.1.2 Contractor shall provide written response to change request within twenty-one (21) calendar days of receipt.

11.8.1.3 *If the parties cannot agree on an equitable adjustment for labor hours attributable to a change, they shall use the Means Facility Cost Data as a guide for labor hours as a basis of negotiation.*

11.8.1.4 *If the parties cannot agree on an equitable adjustment for equipment rental charges attributable to a change, they shall use the Rental Rate Blue Book for Construction Mobilization as a basis of negotiation.*

11.8.2 The amounts that the Contractor and/or its Subcontractors add to a Change Order for profit and overhead will also be considered by the Owner before approval is given. The amounts established hereinafter are the maximums that are acceptable to the Owner.

11.8.2.1 For work performed by its forces, the Contractor will be allowed their actual costs for materials, the total amount of wages paid for labor, the total cost of Federal Old Age Benefit (Social Security Tax) and of Worker's Compensation and Comprehensive General Liability Insurance, plus Bond cost if the change results in an increase in the Bond premium paid by the Contractor. To the total of the above costs, the Contractor will be allowed to add a percentage as noted below to cover overhead and profit combined. Overhead shall be considered to include insurance other than mentioned above, field and office supervisors and assistants, including safety and scheduling personnel, use of small tools, incidental job burdens and general Home Office expenses, and no separate allowance will be made therefore. Allowable percentages for overhead and profit on changes will not exceed 15 percent if the total of self-performed work is less than or equal to \$10,000, 10 percent if the total of self-performed work is between \$10,000 and \$20,000 and 7.5 percent if the total of self-performed work is over \$20,000, for any specific change priced.

11.8.2.1.1 *On contracts based on a Guaranteed Maximum Price (GMP), the Contractor or Design Build Firm shall NOT be entitled to a percentage mark-up on any change order work unless the Change Order increases the Guaranteed Maximum Price.*

11.8.2.2 For subcontracted Work each affected Subcontractor shall figure its costs, overhead and profit as described above for Contractor's work, all Subcontractor costs shall be combined, and to that total Subcontractor cost the Contractor will be allowed to add a maximum mark-up of 10 percent if the total of all subcontracted work is less than or equal to \$10,000, 7.5 percent if the total of all subcontracted work is between \$10,000 and \$20,000 and 5 percent if the total of all Subcontractor work is over \$20,000.

11.8.2.3 On changes involving both additions and deletions, percentages for overhead and profit will be allowed only on the net addition. The Owner does not accept and will not pay for additional contract cost identified as indirect, consequential, or as damages caused by delay.

Article 12. Project Completion and Acceptance

12.1. Closing Inspections

12.1.1 Substantial Completion Inspection. When the Contractor considers the entire Work or part thereof Substantially Complete, it shall notify the ODR in writing that the Work will be ready for Substantial Completion Inspection on a specific date. The

Contractor shall include with this notice the Contractors Punchlist to indicate that it has previously inspected all the Work associated with the request for inspection, has corrected items where possible, and includes all items scheduled for completion or correction prior to final inspection. The failure to include any items on this list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. If any of the items on this list prevents the building from the use to which it is intended, the Contractor shall not request a Substantial Completion Inspection. The Owner and its representatives will review the list of items and schedule the requested inspection, or inform the Contractor in writing that such an inspection is premature because the Work is not sufficiently advanced or conditions are not as represented on the Contractor's list.

12.1.1.1 Prior to the Substantial Completion Inspection, the Contractor shall furnish a copy of its marked-up As-Built Drawings and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalog, wiring diagrams, spare parts, specified written warranties and like publications or parts for all installed equipment, s and like items. Delivery of these items is a prerequisite for requesting the Substantial Completion Inspection.

12.1.1.2 On the date requested by Contractor, or as mutually agreed upon, the AE, ODR, the Contractor and other Owner representatives as determined by the Owner, will jointly attend the Substantial Completion Inspection, which shall be conducted by the ODR or their delegate. If the ODR **concurs with the AE and Contractor in a determination** that the Work is Substantially Complete, the ODR will issue a Certificate of Substantial Completion to be signed by the AE, Owner and Contractor, establishing the date of Substantial Completion **and identifying responsibilities for security, maintenance, and insurance**. AE will provide with this certificate a list of punchlist items (the Pre-Final Punchlist) for completion prior to final inspection. This list may include items in addition to those on the Contractor's punchlist, which the inspection team deems necessary to correct or complete prior to Final Inspection. If the Owner occupies the facility upon determination of Substantial Completion, the Contractor shall complete all corrective Work at the convenience of the Owner, without disruption to Owner's use of the facility for its intended purposes.

12.1.2 Final Inspection. The Contractor shall complete the list of items identified on the Pre-Final Punchlist prior to requesting a Final Inspection. Unless otherwise specified, or otherwise agreed in writing by the parties as documented on the Certificate of Substantial Completion, the Contractor shall complete and/or correct all Work within thirty (30) days of the Substantial Completion date. Upon completion of the Pre-Final Punchlist work, the Contractor shall give written notice to the ODR and AE that the Work will be ready for Final Inspection on a specific date. The Contractor shall accompany this notice with a copy of the updated Pre-Final Punchlist indicating resolution of all items. On the date specified or as soon thereafter as is practicable, the ODR, AE and the Contractor will inspect the Work. The AE will submit to the Contractor a Final Punchlist of open items that the inspection team requires corrected or completed before final acceptance of the Work.

12.1.2.1 Correct or complete all items on the Final Punchlist before requesting Final Payment. Unless otherwise agreed to in writing by the parties, complete this work within seven (7) days of receiving the Final Punchlist. Upon

completion of the Final Punchlist, notify the AE and ODR in writing stating the disposition of each Final Punchlist item. The AE, Owner and Contractor shall promptly inspect the completed items. When the Final Punchlist is complete, and the Contract is fully satisfied according to the Contract Documents the ODR will issue a certificate establishing the date of Final Completion. Completion of all Work is a condition precedent to the Contractor's right to receive Final Payment.

12.1.3 Annotation. Any Certificate issued under this Article may be annotated to indicate that it is not applicable to specified portions of the Work, or that it is subject to any limitation as determined by the Owner.

12.1.4 Purpose of Inspection. Inspection is for determining the completion of the Work, and does not relieve the Contractor of its overall responsibility for completing the Work in a good and competent fashion, in compliance with the Contract. Work accepted with incomplete punchlist items or failure of the Owner or other parties to identify Work that does not comply with the Contract Documents or is defective in operation or workmanship does not constitute a waiver of the Owner's rights under the Contract or relieve the Contractor of its responsibility for performance or warranties.

12.1.5 Additional Inspections

12.1.5.1 If the Owner's inspection team determines that the Work is not Substantially Complete at the Substantial Completion Inspection, the ODR or AE will give the Contractor written notice listing cause(s) of the rejection. The **Contractor** will set a time for completion of incomplete or defective work **as acceptable to the ODR**. Complete or correct all work so designated prior to requesting a second Substantial Completion Inspection.

12.1.5.2 If the Owner's inspection team determines that the Work is not complete at the Final Inspection, the ODR or the AE will give the Contractor written notice listing the cause(s) of the rejection. The **Contractor** will set a time for completion of incomplete or defective work **as acceptable to the ODR**. The Contractor shall complete or correct all Work so designated prior to again requesting a Final Inspection.

12.1.5.3 The Contract Agreement contemplates three (3) comprehensive inspections: the Substantial Completion Inspection, the Final Completion Inspection, and the Inspection of Completed Final Punchlist Items. The cost to the Owner of additional inspections resulting from the Work not being ready for one or more of these inspections is the responsibility of the Contractor. The Owner may issue a Unilateral Change Order deducting these costs from Final Payment. Upon the Contractor's written request, the Owner will furnish documentation of any costs so deducted. Work added to the Contract by Change Order after Substantial Completion Inspection is not corrective work for purposes of determining timely completion, or assessing the cost of additional inspections.

12.1.6 Phased Completion. The contract may provide, or project conditions may warrant, as determined by the ODR, that designated elements or parts of the Work be completed in phases. Where phased completion is required or specifically agreed to by the parties, the provisions of the contract related to Closing Inspections, Occupancy and Acceptance apply independently to each designated element or part of the Work. For all other purposes, unless otherwise agreed by the parties in writing, Substantial

Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Substantially Completion certificate. Final Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Final Completion certificate **or notice**.

12.2 Owner's Right of Occupancy. The Owner may occupy or use all or any portion of the Work following Substantial Completion, or at any earlier stage of completion. Should the Owner wish to use or occupy the Work, or part thereof, prior to Substantial Completion, the ODR will notify the Contractor in writing **and identify responsibilities for security, maintenance, and insurance**. Work performed on the premises by third parties on the Owner's behalf does not constitute occupation or use of the Work by the Owner for purposes of this Article. All Work performed by the Contractor after occupancy, whether in part or in whole, shall be at the convenience of the Owner so as to not disrupt Owner's use of, or access to occupied areas of the project.

12.3 Acceptance & Payment

12.3.1 Request for Final Payment. Following the certified completion of all work, including all punch list items, cleanup, and the delivery of record documents, the Contractor shall submit a certified Application for Final Payment that includes all sums held as retainage and forward to the AE and the ODR for review and approval.

12.3.2 Final Payment Documentation. Prior to or with the Application for Final Payment, Contractor shall submit final copies of all close out documents, maintenance and operating instructions, guarantees and warranties, certificates, record documents and all other items required by the Contract. Submit Consent of Surety to Final Payment and an affidavit that all payrolls, bills for materials and equipment, subcontracted work and other indebtedness connected with the Work, except as specifically noted, are paid, will be paid, or otherwise satisfied within the period of time required by Tex. Gov't Code, Chapter 2251. Furnish documentation establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of claims and liens arising out of the Contract. The Contractor may not subsequently submit a claim on behalf of a Subcontractor or vendor unless the Contractor's affidavit notes that claim as an exception.

12.3.3 Architect/Engineer Approval. The AE will review a submitted Application for Final Payment promptly but in no event later than ten (10) days after its receipt. Prior to the expiration of this deadline, the AE will either 1) return the Application for Final Payment to Contractor with corrections for action and resubmission or 2) accept it, note their approval and send to Owner.

12.3.4 Offsets and Deductions. The Owner may deduct from the Final Payment all sums due from the Contractor. If the Certificate of Final Completion notes any Work remaining, incomplete, or defects not remedied, the Owner may deduct the cost of remedying such deficiencies from the Final Payment. On such deductions, the Owner will identify each deduction, the amount, and the explanation of the deduction on or by the 21st day after Owner's receipt of an approved Application for Final Payment. Such offsets and deductions shall be incorporated via a final Change Order, including Unilateral Change Order as may be applicable.

12.3.5 Final Payment Due. Final Payment is due and payable by the Owner, subject to all allowable offsets and deductions, on the 31st day following the Owner's approval of the Application for Payment. If the Contractor disputes any amount deducted by the Owner, the Contractor shall give notice of the dispute on or before the thirtieth (30th) day

following receipt of Final Payment. Failure to do so will bar any subsequent claim for payment of amounts deducted.

12.3.6 Effect of Final Payment. Final Payment constitutes a waiver of all claims by the Owner, relating to the condition of the Work except those arising from:

12.3.6.1 Faulty or defective Work appearing after Substantial Completion (latent defects); and/or

12.3.6.2 Failure of the Work to comply with the requirements of the Contract Documents; and/or

12.3.6.3 Terms of any warranties required by the Contract, or implied by law; and/or

12.3.6.4 Claims arising from personal injury or property damage to third parties.

12.3.7 Waiver of Claims. ***Submission of an Application for Final Payment by the Contractor*** constitutes a waiver of all claims and liens by the Contractor except those specifically identified in writing and submitted to the ODR prior to the application for Final Payment.

12.3.8 Effect on Warranty. Regardless of approval and issuance of Final Payment, the Contract is not deemed fully performed by the Contractor and closed until the expiration of all warranty periods.

Article 13. Warranty & Guarantee

13.1. Contractor's General Warranty and Guarantee. Contractor warrants to the Owner that all Work is executed in accordance with the Contract, complete in all parts and in accordance with approved practices and customs, and of the best finish and workmanship. The Contractor further warrants that unless otherwise specified, all materials and equipment incorporated in the Work under the Contract are new. The Owner may, at its option, agree in writing to waive any failure of the Work to conform to the Contract, and to accept a reduction in the Contract Price for the cost of repair or diminution in value of the Work by reason of such defect. Absent such a written agreement, the Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute and is not waived by any inspection or observation by the Owner, Architect/Engineer or others, by making any progress payment or final payment, by the use or occupancy of the Work or any portion thereof by the Owner, at any time, or by any repair or correction of such defect made by the Owner.

13.2. Warranty Period. Except as may be otherwise specified or agreed, the Contractor shall repair all defects in materials, equipment, or workmanship appearing within one year from the date of Substantial Completion of the Work. ***If less than all of the Work is accepted as substantially complete (Partial Substantial Completion), the warranty period for the Work accepted begins on the date of Partial Substantial Completion, or as otherwise stipulated on the Certificate of Partial Substantial Completion for the Work.***

13.3. Limits on Warranty. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

13.3.1 Modification or improper maintenance or operation by persons other than Contractor, Subcontractors, or any other individual or entity for whom Contractor is not responsible, unless Owner is compelled to undertake maintenance or operation due to the neglect of the Contractor.

13.3.2 Normal wear and tear under normal usage after acceptance of the Work by the Owner.

13.4 Events Not Affecting Warranty. Contractor's obligation to perform and complete the Work in a good and workmanlike manner in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

13.4.1 Observations by Owner and/or AE.

13.4.2 Recommendation to pay any progress or final payment by AE.

13.4.3 The issuance of a certificate of Substantial Completion or any payment by Owner to Contractor under the Contract Documents.

13.4.4 Use or occupancy of the Work or any part thereof by Owner.

13.4.5 Any acceptance by Owner or any failure to do so.

13.4.6 Any review of a Shop Drawing or sample submittal; or

13.4.7 Any inspection, test or approval by others.

13.5 Separate Warranties. If a particular piece of equipment or component of the Work for which the contract requires a separate warranty is placed in continuous service before Substantial Completion, the Warranty Period for that equipment or component will not begin until Substantial Completion, regardless of any warranty agreements in place between suppliers and/or Subcontractors and the Contractor. The ODR will certify the date of service commencement in the Substantial Completion Certificate.

13.5.1 In addition to the Contractor's warranty and duty to repair, the Contractor expressly assumes all warranty obligations required under the Contract for specific building components, s and equipment.

13.5.2 The Contractor may satisfy any such obligation by obtaining and assigning to the Owner a complying warranty from a manufacturer, supplier, or Subcontractor. Where an assigned warranty is tendered and accepted by the Owner which does not fully comply with the requirements of the Contract, the Contractor remains liable to the Owner on all elements of the required warranty not provided by the assigned warranty.

13.6 Correction of Defects. Upon receipt of written notice from the Owner, or any agent of the Owner designated as responsible for management of the Warranty Period, of the discovery of a defect, the Contractor shall promptly remedy the defect(s), and provide written notice to the Owner and designated agent indicating action taken. In case of emergency where delay would cause serious risk of loss or damage to the Owner, or if the Contractor fails to remedy within 30 days, or within another period agreed to in writing, the Owner may correct the defect and be reimbursed the cost of remedying the defect from the Contractor or its Surety.

13.7 Certification of No Asbestos Containing Materials or Work. The Contractor shall ensure compliance with the Asbestos Hazard Emergency Response Act (AHERA– 40 CFR 763-99 (7)) from all Subcontractors and materials suppliers, and shall provide a notarized certification to the Owner that all equipment and materials used in fulfillment of their contract responsibilities are non Asbestos Containing building Materials (ACBM). This certification must be provided no later than the Contractor's application for Final Payment.

Article 14. Suspension and Termination

14.1. Suspension of Work for Cause. The Owner may, at any time without prior notice, suspend all or any part of the Work if the Owner determines it is necessary to do so to prevent or correct any condition of the Work which constitutes an immediate safety hazard or which may reasonably be expected to impair the integrity, usefulness or longevity of the Work when completed.

14.1.1 The Owner will give the Contractor a written notice of suspension for cause, setting forth the reason for the suspension and identifying the Work suspended. Upon receipt of the notice, the Contractor shall immediately cease all activities related to the identified Work. As soon as practicable following the issuance of a suspension notice, the Owner will conduct an investigation into the circumstances giving rise to the suspension, and issue a written determination of the findings.

14.1.2 If the cause of the suspension is due to actions or omissions within the control of the Contractor, the Contractor will not be entitled to an extension of time for delay resulting from the suspension. If the cause of the suspension is something not within the control of the Contractor and the suspension will prevent the Contractor from completing the Work within the Contract Time, the suspension is an Excusable Delay and a Time Extension will be granted through a Change Order.

14.1.3 Suspension of work under this provision will be no longer than is reasonably necessary to remedy the conditions giving rise to the suspension.

14.2. Suspension of Work for Owner's Convenience. Upon seven (7) calendar days written notice to the Contractor, the Owner may at any time without breach of the Contract suspend all or any portion of the Work for its own convenience. Upon resumption of the Work, if the suspension prevents the Contractor from completing the Work within the Contract Time, it is an Excusable Delay. A notice of suspension for convenience may be modified by the Owner at any time on seven

(7) calendar days written notice to the Contractor. If the Owner suspends the Work for its convenience for more than 60 consecutive calendar days, the Contractor may elect to terminate the contract pursuant to the provisions of the contract.

14.3. Termination by Owner for Cause

14.3.1 ***Upon thirty (30) days written notice to the Contractor and its Surety,*** the Owner may, without prejudice to any right or remedy, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, under any of the following circumstances:

14.3.1.1 Persistent or repeated failure or refusal, except during complete or partial suspensions of work authorized under the Contract, to supply enough properly skilled workmen or proper materials; and/or

14.3.1.2 Persistent disregard of laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, including the ODR; and/or

14.3.1.3 Persistent failure to prosecute the work in accordance with the Contract, and to insure its completion within the time, or any approved extension thereof, specified in this Contract; and/or

14.3.1.4 Failure to remedy defective work condemned by the ODR; and/or

14.3.1.5 Failure to pay Subcontractors, laborers, and material suppliers pursuant to Tex. Gov't Code Chapter 2251; and/or

14.3.1.6 Persistent endangerment to the safety of labor or of the Work; and/or

14.3.1.7 Failure to supply or maintain statutory bonds or to maintain required insurance, pursuant to the contract; and/or

14.3.1.8 Any material breach of the Contract; and/or

14.3.1.9 The Contractor's insolvency, bankruptcy, or demonstrated financial inability to perform the work.

14.3.2 Failure by the Owner to exercise the right to terminate in any instance is not a waiver of the right to do so in any other instance.

14.3.3 Upon receipt of a termination notice, the Contractor or its Surety has thirty days to cure the reasons for the termination or demonstrate to the satisfaction of the Owner that it is prepared to remedy to the condition(s) upon which the notice of termination was based. If the Owner is satisfied that the Contractor or its Surety can remedy the reasons for the termination and complete the Work as required, the notice of termination shall be rescinded in writing by the Owner and the Work shall continue without an extension of time.

14.3.4 If at the conclusion of the thirty day cure period the Contractor or its Surety is unable to demonstrate to the satisfaction of the Owner its ability to remedy the reasons for termination, the Owner may **immediately terminate the employment of the Contractor**, make alternative arrangements for completion of the Work and deduct the cost of completion from the unpaid Contract Sum.

14.3.4.1 Recoverable costs include additional Owner expenses for items such as AE services, other consultants, and contract administration.

14.3.5 The Owner will make no further payment to the Contractor or its Surety until all costs of completing the Work are paid. If the unpaid balance of the Contract Sum exceeds the costs of administering and finishing the Work, the Contractor will receive the excess funds. If costs of completing the Work exceed the unpaid balance, the Contractor or its Surety will pay the difference to the Owner.

14.3.5.1 This obligation for payment survives the termination of the Contract.

14.3.6 The owner reserves the right in termination for cause to take assignment of all contracts between the Contractor and its Subcontractors, vendors and suppliers. The ODR will promptly notify the Contractor of the contracts the Owner elects to assume. Upon receipt of such notice, the Contractor shall promptly take all steps necessary to effect such assignment.

14.4 Termination for Convenience of Owner. Upon written notice to the Contractor and the AE, the Owner may, without breach, terminate the Contract for any reason.

14.4.1 The notice will specify the reason for and the effective date of contract termination. The notice may also contain instructions necessary for the protection, storage or decommissioning of incomplete work or s, and for safety.

14.4.2 Upon receipt of the notice of termination, the Contractor shall immediately proceed with the following obligations:

14.4.2.1 Stop all work.

14.4.2.2 Place no further subcontracts or orders for materials or services.

- 14.4.2.3 Terminate all subcontracts.
- 14.4.2.4 Cancel all materials and equipment orders as applicable.
- 14.4.2.5 Take appropriate action to protect and preserve all property related to this Contract which is in the possession of the Contractor.

14.4.3 When the Contract is terminated for the Owner's convenience, the Contractor may recover from the Owner payment for all Work executed ***before the notice of termination along with the actual and reasonable cost of any additional work required to secure the project and property related to the Contract following the notice of termination. The Contractor will not be entitled to recover any other costs or damages arising from the termination for convenience of the Owner including, but not limited to, claims for lost profits or lost business opportunities.***

14.5 Termination By Contractor. If the Work is stopped for a period of ninety (90) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, then the Contractor may, upon thirty

(30) additional days' written notice to the ODR, terminate the Contract and recover from the Owner payment for all Work executed ***before the work stoppage and the actual and reasonable cost of securing the project and property related to the Contract during the work stoppage. The Contractor will not be entitled to recover any other costs or damages arising from the work stoppage including, but not limited to, claims for lost profits or lost business opportunities.*** If the cause of the work stoppage is removed prior to the end of the thirty (30) day notice period, the Contractor may not terminate the Contract.

14.6 Settlement on Termination. Within 180 days of the effective date of Contract termination for any reason, the Contractor shall submit a final termination settlement proposal to the Owner based upon recoverable costs as provided under the contract. If the Contractor fails to submit a settlement proposal within the time allowed, the Owner may ***unilaterally*** determine the amount due to the Contractor because of the termination.

Article 15. Dispute Resolution

15.1 Unresolved Contractor Disputes. The dispute resolution process provided for in Tex. Gov't Code, Chapter 2260, shall be used by the Owner and the Contractor to attempt to resolve any claim for breach of contract made by the Contractor, that is not resolved under procedures described throughout the Uniform General Conditions, Supplemental Conditions, or Special Conditions of the Contract.

15.2 Alternative Dispute Resolution Process. The Owner may establish a dispute resolution process to be utilized in advance of that outlined in Tex. Gov't Code, Chapter 2260.

15.3 Before submitting any matter not resolved in the ordinary course of business to the dispute resolution process provided for in Tex. Gov't Code, Chapter 2260, the Contractor shall make a written request to the Owner's designated official in charge of construction contract administration for a determination of the matter in dispute. The written request shall clearly state the disputed issue and include or incorporate by specific reference all information or documents that the Contractor wants the official to consider in reaching his/her determination. The official shall issue a written notice of decision on the request. Within 30 days of the notice of decision, the Contractor may submit a request for reconsideration to the official that particularly states the factual and legal basis for the Contractor's objections to the

official's decision. The official will review his/her decision and consider the basis for reconsideration asserted in the request. The official will issue a written notice of decision following reconsideration which shall be final and conclusive on all matters except for claims of breach of contract which are then subject to the dispute resolution process provide by Chapter 2260.

15.4 ***Nothing herein shall hinder, prevent or be construed as a waiver of Owner's right to seek redress on any disputed matter in a court of competent jurisdiction.***

15.5 ***Nothing herein shall waive or be construed as a waiver of the state's sovereign immunity.***

Article 16. Miscellaneous

16.1. Supplemental and Special Conditions. When the Work contemplated by the Owner is of such a character that the foregoing Uniform General Conditions of the Contract cannot adequately cover necessary and additional contractual relationships, the Contract may include Supplemental and Special Conditions as described below:

16.1.1 Supplemental Conditions may describe the standard procedures and requirements of contract administration followed by a contracting agency of the State. Supplemental Conditions may expand upon matters covered by the Uniform General Conditions, where necessary, provided the expansion does not weaken the character or intent of the Uniform General Conditions. Supplemental Conditions are of such a character that it is to be anticipated that a contracting agency of the State will normally use the same, or similar, conditions to supplement each of its several projects.

16.1.2 Special Conditions shall relate to a particular project and be peculiar to that project but shall not weaken the character or intent of the Uniform General Conditions.

16.2. Federally Funded Projects. On Federally funded projects, the Owner may waive, suspend or modify any Article in these Uniform General Conditions which conflicts with any Federal statute, rule, regulation or procedure, where such waiver, suspension or modification is essential to receipt by the Owner of such Federal funds for the project. In the case of any project wholly financed by Federal funds, any standards required by the enabling Federal statute, or any Federal rules, regulations or procedures adopted pursuant thereto, shall be controlling.

16.3. Internet-based Project Management s. At its option, the Owner may administer its design and construction management through an Internet-based management. In such cases, the Contractor shall conduct communication through this media and perform all project related functions utilizing this database. This includes correspondence, submittals, requests for information, vouchers or payment requests and processing, amendment, change orders and other administrative activities.

16.3.1 Accessibility And Administration.

16.3.1.1 When used, the Owner will make the software accessible via the Internet to all project team members.

16.3.1.2 The Owner shall administer the software.

16.3.2 Training. When used, the Owner shall provide training to the project team members.

End of Uniform General Conditions

ATTACHMENT NO. 19

Miscellaneous Requirements

Section 010000 Miscellaneous Requirements

1. Summary

These Miscellaneous Requirements are issued as supplements to the Uniform General Conditions for Construction Contracts (UGCs) and any Special Conditions that form a part of the Contract for Construction between the Owner and the General Contractor (or Construction Manager, or Design-Build Contractor). The term "Contractor", as used herein, is meant to refer to a General Contractor, or a Design-Build Contractor, or a Construction Manager. Should any provision of these Division 1 Specifications conflict with the Contract, the UGCs or the Special Conditions, the latter shall govern.

2. Removal of Debris (see Section 015240)

The Contractor shall remove and legally dispose of all demolition debris and all unused construction materials off-site. Unless specifically noted otherwise, all excess earth and rock excavation materials shall be removed and disposed of offsite. Such demolition debris, unused construction materials and excess excavated earth and rock shall be handled, transported and legally disposed of at the Contractor's expense.

3. Drawings and Specifications (also see UGC Article 6)

- 3.1 The Drawings and Specifications are intended to describe and provide for a finished and complete piece of Work that meets the requirements of all the applicable governing laws, ordinances, rules, and regulations of the locality. It is mandatory that all work must meet these requirements.
 - 3.1.1 No extra compensation will be allowed for the Contractor's rework due to its failure to conform to any such requirements unless the original installation was directed by written order issued by the A/E or the Owner.
 - 3.1.2 Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be like effect as if shown or mentioned in both. If the Contractor believes that some information is missing then that information should be requested of the Owner or A/E in writing. Should the Drawings disagree among themselves, or with the Specifications, the better quality and/or greater quantity of work and/or materials shall be included with the Contractor's project proposed pricing. In the case where the Specifications do not fully agree with the material schedules, the material schedules shall govern.
 - 3.1.3 The general character of the detail work is shown on Drawings, but minor modifications may be made by A/E in full size Drawings, shop drawings, or models. Contractor shall not attempt to execute any part of the Work requiring such drawings until he has received approved copies of same.
 - 3.1.4 Where the word "similar or typical" occurs on Drawings, they shall be understood in their general sense and not as meaning identical. All details shall be worked out in relation to their location and their connection to other parts of the Work. If the Contractor finds this to be beyond its capability, interpretations and directions should be requested of the A/E.
 - 3.1.5 Small scale and large scale drawings are intended to be mutually compatible and explanatory. In case of variances, the following order of preferences is established to define the intent of the work.

- 3.1.6 Explanatory notes on Drawings;
 - 3.1.6.1 Recorded dimensions;
 - 3.1.6.2 Large scales details;
 - 3.1.6.3 Small scale details;
 - 3.1.6.4 Scaled measurements
- 3.2 The "Scope of Work" description placed in the front portion of each section of the Specifications is intended to designate the scope and locations of all items of Work included in that section, either generally or specifically. It is not, however, intended to limit the scope of the work where plans, schedules, or notes indicate a larger scope.

4. Interpretations of Documents (see UGC 3.2.2)

Whether bidding or building the Project, if there is any doubt as to the meaning of any part of the Construction Documents, the Contractor shall submit a written request to the Owner seeking an interpretation. If the question has to do with technical requirements, the Contractor should provide the A/E with a copy of the request as the Owner will typically ask the A/E for the technical interpretation. If such a request is made during bidding, it should be made at least ten days before bid opening. Interpretations shall then be issued by written response only and during bidding only by issuing an "Addendum" to the bid documents. When in doubt during construction, the Contractor should proceed only with a written interpretation by the Owner, or in its absence, proceed only after notifying the Owner in writing about the interpretation that is being used. Failure of the Contractor to request an interpretation shall not relieve the Contractor from responsibility to complete the Work to the Owner's satisfaction. If the Contractor does not agree that an interpretation received is satisfactory and without cost or time implications, the Owner should be notified immediately in writing of that fact.

5. Materials and Work (see UGC 8.1)

- 5.1 Unless otherwise specified, all materials shall be new and free of asbestos, noxious or toxic fumes, urea-formaldehyde and lead (lead in potable water system) and both workmanship and materials shall be of the best quality. If requested by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of his materials and workmanship. Any work installed that does not meet the requirements of the Construction Documents shall be removed and replaced with conforming Work. **(UGC 3.3.5)**
- 5.2 The Contractor and subcontractors shall be responsible for the proper care and protection of all materials and equipment furnished both during and after installation. Such materials and equipment may be staged inside the construction fence, or areas designated by the Owner, but only consistent with a Staging Plan acceptable to the Owner. All materials affected by the weather shall be covered and protected to keep them free from damage while being transported to the site. When stored on site, they shall be placed in watertight storage shed/compartments or otherwise protected from the weather. Any material damaged by water or other causes shall be removed from the site and replaced with new material.
- 5.3 When necessary to avoid delay or to protect work or equipment, provide suitable watertight coverings over windows, doors, skylights, hatchways, and such other openings admitting rain, including the Owner's materials within the building area when working on a combined effort.
- 5.4 The Contractor and subcontractors shall protect and be responsible for their Work and any damage to their Work from the date of delivery or installation until Substantial Completion when the Owner will take possession and assume responsibility. They shall make good, without cost to the Owner, any damage or loss that may occur to their Work during this period.
- 5.5 When any room in one of Owner's buildings has been provided for use as a shop, storeroom, etc., the Contractor shall restore the room to equal, or better, condition by providing repairs, patching, cleaning, and painting at its sole expense.
- 5.6 During the execution of the Work the open ends of all piping, conduit and mechanical ducts and openings in equipment shall be sealed in such a way as to prevent the entrance of foreign matter. All heating, ventilating, plumbing and electrical equipment shall be covered and protected. All plumbing fixtures shall be protected and boarded over to prevent their usage by any person. All drains shall be covered until they are placed into service.

- 5.7 The Contractor shall provide all scaffolding and ladders necessary for performing the Work. All scaffolding shall be so constructed, anchored and braced to comply in all respects with OSHA guidelines to afford safety and protection to both workers and their Work, the inspectors and the Work of other contractors.
- 5.8 Except as otherwise specified, the Contractor shall furnish at its own cost and risk all tools, apparatus, hoists or cranes, derricks, etc. needed for the Work.
- 5.9 Temporary equipment shall be installed in such a manner that finished Work will not be damaged by smoke, falling mortar, concrete or other causes. The location and arrangement of temporary equipment shall be subject to the approval of the Owner.
- 5.10 All temporary shoring required for the installation of Work shall be provided by the Contractor who will take all responsibility.
- 5.11 The Contractor and its subcontractors shall provide on the premises, at locations approved by the Owner, suitable watertight storage sheds for the storage of tools and equipment. Such sheds shall be at least 6 inches off the ground on heavy joists. The Contractor shall maintain such sheds in good condition and remove them when directed by the Owner.
- 5.12 **Also see Sections 013100, 013523 and 015000 for related requirements.**

6. Intent of the Documents (see UGC 11.1.2)

- 6.1 It is the intention of the Construction Documents to describe and require the complete installation of the various systems and the Contractor is to furnish all items necessary to make the various systems complete, although each and every item required may not be specifically mentioned in the Construction Documents.
- 6.2 It is not the intent of the Construction Documents to limit materials, equipment or fixtures to the product of any particular manufacturer. Where definite materials, equipment or fixtures have been specified by name, manufacturer or catalog number, it has been done to set a quality standard, applicability, physical conformity and other characteristics. It is not the Owner's intent to discriminate against or prevent any dealer, jobber or manufacturer from furnishing materials, equipment or fixtures that meet or exceed the characteristics of the specified items. However, substitutions of materials shall not be made without a specific written request by the Contractor having been approved by the Owner in writing. **(See paragraph 18 of this Section).**
- 6.3 Any discrepancies in the Specifications must be reported to the Owner for clarification, correction and interpretation from the A/E before the work is executed.

7. Existing Underground Utilities

If existing underground lines occur in the site where the work is to be accomplished, such lines will be located and staked by the Contractor for the benefit of the Owner and the Contractor prior to start of the work. Contractor shall maintain these markings throughout the duration of the construction project. Prior to any excavation, the Contractor shall review with the Owner the locations of all underground utilities and receive the Owner's written permission to proceed.

8. Pumping, Shoring, Etc.

- 8.1. Pumping: When necessary to avoid delay or to protect the Work or the premises, provide suitable pumping equipment and keep excavations, pits and other areas involved free of water that may leak, seep, or rain in. Do not allow water to flow into excavations. Do not allow water to flow off site in quantities or at rates that exceed the quantities or rates that existed prior to the start of construction
- 8.2. Shoring: The Contractor shall provide and be responsible for all temporary shoring required for execution and protection of the work. After all construction is secure and stable, and when authorized by the Structural Engineer or Civil Engineer, the Contractor shall remove all shoring.

9. Hazardous Materials

- 9.1 If during the course of his work, the Contractor observes the existence of asbestos, or asbestos bearing materials, the Contractor shall immediately terminate further operations and notify Owner of the condition. The Owner will, after consultations, determine a further course of action.(UGC 7.5)
- 9.2 Contractor shall furnish Manufacturer's Safety Data Sheets (MSDS) on all materials and products installed by the Contractor and subcontractors on this project to indicate no asbestos-containing materials have been installed.

10. Substantial Completion (see UGC 1.26 and 12.1.1)

"Substantial Completion" constitutes a stage of project completion that will allow Owner beneficial occupancy for the purpose of safely installing furnishings, maintaining normal security over them, and use of the facility for its intended purpose. Substantial Completion shall not be considered as Final Completion as there may be minor correction items outstanding and there are additional completion items required to achieve Final Completion. Upon acceptance that an entire Project, or a portion of a Project, as Substantially Complete the Owner will take possession from the Contractor and assume operations, maintenance and insurance liability responsibilities for that portion of the Project.

11. Coordination (see UGC 3.3.6.2 and 4.4 of the CSP contract)

The Contractor and subcontractors on the project shall coordinate their work with each other, advising on work schedules, equipment locations, etc. It shall be the responsibility of Contractor to assure this coordination and to schedule and supervise the work of all subcontractors performing work under this contract. Contractor shall be responsible for the proper fit of the various parts of the Work and for the coordination of operations of all trades, the subcontractors and the material suppliers engaged upon or in connection with the Work as well as those of his own employees. Contractor shall accommodate and coordinate with other independent contractors and Owner personnel on site during construction to allow them necessary access to perform their work.

12. Observation of Work (see UGC 8.5.1)

The Owner's representatives, as well as the A/E, shall have access to the work at all times wherever it is in preparation or progress. The Contractor shall provide proper and safe facilities for such access and for observation.

13. Cooperation with Building Officials

Contractor, Subcontractor and all related suppliers, vendors and employees will cooperate with applicable utility and government officials and inspectors at all times. If such official or inspector deems special inspections necessary, provide assistance and facilities that will expedite such inspection or observation.

14. Notification

The Contractor shall notify the Owner at least 48 hours in advance (Monday thru Friday) of concrete pours, roofing installation, start of each new section of classification of work, concealment of plumbing, heating, air conditioning, or electrical work.

15. Ongoing Operations/Construction Personnel

- 15.1 The facilities of the campus will only be available during the scheduled construction time-period as specified by the Owner, and if not specified, then from 8:00 a.m. until 6:00 p.m., Monday through Friday. Work during other times, including weekends, shall only be allowed with prior request and written authorization from the Owner. In addition, the Contractor shall accommodate and coordinate its construction work force and activities to allow the Owner's forces and Owner's separate contractors (i.e. telephone, data, IT, computer, and furniture installation) to enter the jobsite to perform their work.

- 15.2 This project is surrounded by continuously functioning campus facilities, including student housing, academic and research efforts. The Contractor shall make every effort to avoid disruptions to ongoing campus activities and to maintain a safe environment for students, faculty, and staff in the areas adjacent to the Project.
- 15.3 Adjacent facilities will continue to be used for their intended purpose while this Project is underway and the following requirements shall apply:
- 15.3.1 Contractor, Subcontractors, Owner and A/E shall meet regularly to coordinate and schedule any construction activities affecting ongoing operations including, but not limited to: testing days, student/staff holidays, special events, etc.
 - 15.3.2 The Owner may have other contractors, or its own employees, performing work on the campus and in the vicinity of the Contractor's Work. The Contractor shall not commit any act, or allow any act, that will interfere with the performance of work by these other work forces. The Contractor shall cooperate with all performing parties so that the Owner can realize the best possible outcome of all projects involved and requiring coordination.
 - 15.3.3 Student, faculty and general public safety is of utmost importance. Fire and life safety exiting from buildings must be maintained at all times and closely monitored. Review and receive approval for changes in existing conditions with the local fire marshal for each phase of construction. Provide temporary signage as required by the fire marshal and/or the Owner.
 - 15.3.4 Fire arms, drugs, intoxicating beverages, X-rated materials, etc. are banned from the Owner's property.
 - 15.3.5 Smoking is not allowed inside any campus building or anywhere on the campus except in designated areas. Smoking will not be allowed in any enclosed area of the building(s) of this project. Enclosed, as used here, refers to erection of exterior walls and overhead structure for any portion of the project; it does not mean to limit the term to only "dried in" situations. Use of or possession of illegal drugs or alcohol on the project site or anywhere on campus is prohibited.
 - 15.3.6 Construction personnel are not to communicate or interact with students and faculty on site. Only the Project Superintendent, Project Manager and/or their appointed representatives may communicate with the faculty and administrative staff on an as needed basis.
- 15.4 Campus utilities must not be interrupted except when scheduled and approved in advance through Owner-designated campus channels. The Contractor or his personnel shall NOT open or close any valves of the central campus utility systems. Valve operation is to be done by University utilities personnel only. The Contractor shall not activate or de-activate any campus utility system or component of any system, without express written direction from the Owner.
- 15.5 Chemical cleaning of new utility additions shall be done by circulating a good non-phosphate cleaner through as much of the new system as possible. Prior to dumping the cleaning agent, the Contractor shall notify the local City/County industrial water treatment department to sample the effluent. If the City/County officials approve of dumping to drain, then the Contractor will dump into the sanitary sewer. The Contractor shall refill the new system with water and again have the City/County water treatment officials sample the effluent prior to dumping. If at any stage the City/County water treatment officials refuse to accept the effluent, then the Contractor must make special arrangements for legal disposal at its expense and provide the Owner with copies of the resulting shipping and disposal manifests.

16. Field Measurements (see 014518 – Field Engineering)

- 16.1 The Contractor will employ an experienced, competent staff to establish or survey the building lines, elevations, and field dimensions. Each subcontractor shall verify all existing grades, lines, levels and dimensions affected by their work.
- 16.2 Before ordering any materials or doing any work, each subcontractor shall verify all measurements and shall be responsible for their correctness. Any difference between the actual dimensions and conditions on the site and those indicated on the drawings shall be submitted to the Owner for instructions and consideration before proceeding with the work.

17. Substitutions (see UGC 8.3.5 and 8.3.6)

The Contractor may submit and Owner and A/E will consider substitutions that have not been submitted and approved prior to receipt of proposals. Contractor shall submit a written substitution request on an Owner approved form and the substitution shall be fully identified for product or method being replaced by substitution, including related specification section and drawing number(s) and fully documented to show compliance with the requirements of the Construction Documents. Include product data/drawings, description of methods, samples where applicable and Contractor's detailed comparison of significant qualities between the specified item and the proposed substitution. The Contractor shall include a statement of effect on construction time, coordination and other affected work, cost information or proposal and a written guarantee indicating the proposed substitution will result in overall work equal to or better than work originally indicated. Contractor shall allow sufficient time for review and approval of such proposed substitutions.

Section 012000 Project Meetings

1. Pre-Construction Conferences (see UGC 3.1.1 and CSP Contract 5.1 and Exhibit G)

- 1.1 Prior to commencing construction, the Contractor shall schedule a meeting to review all aspects of the Construction Project. The time of the Pre-Construction Conference and the attendees shall be determined through discussions between the Owner and Contractor prior to scheduling.
- 1.2 The following is a tentative agenda for the Pre-Construction Conference:
 - Critical work sequencing;
 - Designation of responsible personnel;
 - Procedures for processing submittals, substitutions, applications for payment, proposal requests, change letters and Contract Close-out procedures;
 - Parking and access to the site;
 - Office, storage areas and temporary facilities;
 - Utility information;
 - Testing procedures;
 - Procedures for maintaining record documents.
- 1.3 Minutes of the Pre-Construction Conference will be kept and distributed to all attendees and to all team members not present at the meeting. All final decisions recorded in the minutes shall become binding on the parties.

2. Pre-Installation Conferences

Conduct a Pre-installation Conference at the site before each construction activity that requires extensive coordination and for those activities where a pre-installation meeting is specifically required by the specification section.

3. Progress Meetings (see UGC 8.5 and 8.6)

- 3.1 The Contractor shall schedule progress meetings at regular intervals to discuss and monitor the construction project. The Contractor shall determine the meeting times and required attendees.
- 3.2 Minutes of the Progress Meeting shall be kept and distributed to all attendees and to all team members not present at the meeting.

4. Close-out Meetings

- 4.1 When the Contractor determines that a Project, including all punch list items, has been substantially completed and an acceptance date established, a formal project close-out meeting will be scheduled and attended by the parties designated by the Owner and A/E.
- 4.2 At the close-out meeting, upon documentation of exceptions and assignment of completion responsibilities, the close-out documents required by the Construction Documents will be released to the Owner.
- 4.3 Minutes of the Project Close-out meeting will be kept by the A/E and any exceptions identified will be recorded. Specific completion dates for the exceptions will be established and tracked by the Owner to ensure expeditious completion. Copies of the minutes will be distributed to all attendees.

Section 013100 Project Administration

1. Subcontracts (see UGC 3.3.6)

- 1.1 Contractor agrees to bind every subcontractor, and every subcontractor agrees to be bound by the terms and conditions of the Owner's contract.
- 1.2 The Contractor is required to submit a list of all first tier subcontractors to the Owner as subcontracts are executed.

2. Flow of Communications (see UGC 3.2, 3.3.1 and 3.3.6)

- 2.1 The Owner's Designated Representative (ODR) is the Owner's primary representative for the Project who will be designated to the Contractor in writing. The ODR is the only party authorized to issue written/or oral instructions directly to the Contractor that involve changes to the contract scope, cost or time of the Work. If any other party directs the Contractor to make changes to the Work that will involve scope, cost or time the Contractor should notify the ODR immediately in writing. **(see UGC 1.17)**
- 2.2 Normally, the Owner will also designate in writing an Owner's Designated Site Representative (ODSR). The ODSR will have the authority, delegated by the ODR, to make decisions on behalf of the Owner concerning coordination with the University of Work on the site including: traffic controls, site safety, scheduling of utility outages, and all matters within the contract that do not involve changes to the scope, cost and/or time for completion. The ODSR, or a designee, will coordinate and conduct quality inspections of the construction work as it is installed or performed, authorize payments (except first and final) and conduct final acceptance inspections. The ODSR will be the Contractor's primary point of contact on the site.
- 2.3 The Architect/Engineer (A/E) is responsible to the Owner for the technical aspects of the Design, including the review of Contractor Submittals and for interpretation of the technical requirements of the Construction Documents. The Owner's written instructions to the Contractor on these matters will generally be issued through the A/E.
 - 2.3.1 The A/E may issue clarifications and other information not affecting the contract scope, cost or time by means of an A/E's Supplemental Instructions (ASI), or similar clarification form, that will be sequentially numbered. Both the A/E and Contractor will maintain separate ASI registers. **(See UGC 3.2.2).**
 - 2.3.2 If Contractor believes such a clarification will create a change in the contract scope, cost or time for performance, a written notification of such must be provided to the ODR before performing the Work involved. The Contractor should proceed with such Work only after being directed to do so in writing by the ODR.
- 2.4 Any oral direction to the Contractor by the ODR, ODSR or the A/E should be confirmed in writing prior to the Contractor proceeding with the direction.
- 2.5 All Project correspondence shall include the Project Number and Name in the title or reference.
- 2.6 All correspondence originated by the Contractor should include simultaneous copies to the ODSR and the A/E. Such correspondence that involves changes, or proposed changes, to the scope, cost or time for the Work, or any dispute or potential dispute, should also include copies to the ODR.

- 2.7 All subcontractor correspondence to either the Owner or the A/E shall be routed through the Contactor.
- 2.8 All subcontractor Requests for Information (RFIs) shall be submitted by and under cover of the Contractor, who is to carefully review and ensure the completeness and appropriateness of the question prior to submission. The Contractor should sequentially number each RFI and submit them directly to the A/E, with copies to the ODSR. The Contractor and A/E will maintain separate RFI logs.
- 2.9 The preparation and handling of Pay Applications, Request for Information, Change Proposals, Submittals, etc. are to be processed as discussed in the Pre-Construction Conference meeting.

3. Project Changes (see UGC 9.1, 9.3.3.3, 9.6.2.2 and Article 11)

- 3.1 All changes to the Contract involving scope, cost, or time will be issued on the standard Houston Community College (HCC) Change Order form. Such Change Orders are valid only if signed by either the Chancellor of HCC or by the Executive Director for Construction Administration. A single Change Order may include several different change issues and they will not be required to be related to each other.
- 3.2 Prior to issuing a Change Order, the Owner must have received from the Contractor a Change Order Proposal that is complete in its description of the changes in scope and its detailed presentation of cost and time implications of the proposed change. If the Owner and Contractor do not agree on the implications of a proposed change, they will meet and discuss and resolve their differences prior to proceeding with the changes to the Work.
 - 3.2.1 The Contactor shall summarize all costs for each change at each level of subcontractor and supplier by preparing a "Cost Analysis", and shall provide each subcontractor's cost summary as backup. Additional support documentation from both the Contractor and its subcontractors is encouraged.
 - 3.2.2 Where the Contractor believes it is entitled to a time extension, it shall so state as part of its response to the Change Proposal, including a justification for such request. Time extensions will be granted only if a Change Order Proposal affects the activities on the Critical Path of the Owner approved Project Schedule (i.e., when the work impacts the "Contract Substantial Completion Date").
 - 3.2.3 If the Owner and Contractor cannot mutually agreed upon a fair and reasonable cost and time settlement, the Owner may: 1) Reject the quotation and void the Change Order Proposal, 2) Issue instruction to the Contractor to proceed on a time and material basis for a price to be determined later not to exceed a fixed maximum dollar and time, or 3) Issue a Unilateral Change Order.
 - 3.2.4 The Owner may issue Field Orders directly to the Contractor for minor changes to the contract, which can be negotiated in the field. Pricing backup shall be the same as a Change Order Proposal and is to be outlined as noted above. Once the Owner and the Contractor have signed the Field Order, the work is authorized and the Field Order will be included in the next Change Order.

4. Liquidated Damages (see UGC 9.11, 12.1.4 and 25.2)

If assessed, liquidated damages will be withheld from progress payments beginning with the first payment after the Contract completion date and until all work of the contract is complete. The amount assessed shall be deducted from the contract price through a written Change Order.

5. Site Use Issues

- 5.1 The Contractor is responsible for the actions of its entire work force, including Subcontractor and Supplier employees, whenever they are on the campus. Harassment of any kind toward any person will not be tolerated. Offending workers will be removed from the project immediately and permanently. Harassment includes any action such as jeering, whistling, calling-out, staring, snickering, making rude or questionable comments, or similar behavior. Any offending worker or employee will be removed.

- 5.2 The Contractor shall provide and submit a program plan for worker orientation, identification and control of access to the site and for managing personnel records, including payroll records. All workers on the project shall participate in this program before beginning work of the project. This plan shall include, as a minimum:
- 5.2.1 Employee identification badges with a photo of the employee, the employer and employees' name. Badges shall be provided for all employees and produced by a system on site. This identification shall be worn at all times while on the project site. Lack of an ID badge shall be grounds for removal from the project until the badge is produced.
- 5.2.2 Identification badges for workers, busing of workers from remote parking lots, frequent written and verbal reminders to the work force of appropriate behavior and avoidance of campus facilities and publication of acceptable access and egress routes from the work site are all minimum requirements of the plan.

6. Shop Drawings and Submittals (see UGC 8.3 and CSP contract 4.5)

- 6.1 Refer to the UGC for requirements not identified in this section.
- 6.2 The Contractor shall assign an identifying number to each submittal following a format to be established at the Pre-Construction Conference. The same number with a numerical or alphabetical suffix will be used to identify re-submittals.
- 6.3 The burden of timeliness to complete the submittal process is on the Contractor. The Contractor shall allow sufficient time within the construction schedule for the A/E and Owner to review and approve all submittals, including time for all re-submittals on any unaccepted/rejected submittal.
- 6.4 Any deviation from the Construction Documents shall be conspicuously noted on the submittal and the transmittal cover sheet. Failure to so note deviations will void any action taken on the submittal.
- 6.5 All manufacturers' data contained within the submittal shall have all inapplicable features crossed out or deleted in a manner that will clearly indicate exactly what is to be furnished.
- 6.6 Equipment of larger sizes than shown, even though of a specified manufacturer, will not be acceptable unless it can be demonstrated that ample space exists for proper installation, operations and maintenance.
- 6.7 The Owner will not be responsible for payment of any item that has not been submitted and approved through the established submittal process. **(UGC 10.5.1.4)**
- 6.8 The exact number of submittal copies required for distribution will be determined at the Pre-Construction Conference. The Contractor shall anticipate providing a minimum of four (4) copies of each submittal in addition to those needed by the Contractor and its subcontractors. Two (2) of the approved copies will be returned to the Contractor and one (1) shall be set aside for subsequent turn over to Owner at Project Closeout.

7. Substitution of Materials, Labor and Equipment (see UGC 8.3.5 and 010000 paragraph 17)

- 7.1 Refer to the UGC for requirements not identified in this section.
- 7.2 The specified products referenced in the Construction Documents establish minimum qualities for which substitutions shall at least equal to be considered acceptable. The burden of proof of equality rests with the Contractor. The Owner retains sole authority for acceptance of substitutions.
- 7.3 All substitutions shall be submitted with ninety (90) days of the Notice to Proceed for Construction and be clearly marked as such on the transmittal cover sheet for the submittal.
- 7.4 The Contractor shall allow a minimum of four (4) weeks for review of each substitution by the A/E and/or Owner in addition to the requirements identified in Section 7.3 above.
- 7.5 When requested by the A/E, the Contractor shall provide a sample of the proposed substitution item. In some cases, samples of both the specified item and the proposed item shall be required for comparison purposes.
- 7.6 Acceptance of materials and equipment will be based on the supplier/manufacturer's published data and will be tentative subject to submission of complete shop drawings and/or specifications indicating compliance with the Construction Documents. Acceptance of

materials and/or equipment under this provision shall not be construed as authorizing any deviation from the Construction Documents, unless specifically directed in writing from the A/E.

- 7.7 Any and all additional costs or time resulting from the acceptance or rejection of any substitution shall be the sole responsibility of the Contractor. These include costs that are not presented at the time of the substitution request and those costs that become known after the approval of the substitution. This includes direct as well as indirect costs.
- 7.8 If a substitution is accepted, and the substitute proves defective, or otherwise unsatisfactory as determined by the Owner for the service intended within the warranty period, the substitute shall be replaced with the material or equipment specified in the Construction Documents, or as approved by the Owner, at no additional cost to the Owner.

8. Allowances (see 13.1 and Exhibit 7 of CSP contract)

- 8.1 Allowances shall include:
 - Cost of materials to Contractor.
 - Delivery to project site; handling, storage and installation at project site.
 - Protection, security, including insurance.
 - Contractor's overhead and profit and other costs.
- 8.2 At contract closeout, monies remaining in any allowance line item will be credited to the Owner by Change Order.

9. Alternates

- 9.1 Alternates will be exercised and added to the proposed contract sum at the option of the Owner.
- 9.2 For any or all additive alternates selected or otherwise approved for addition to the contract sum by the Owner, the Contractor shall coordinate all related work and modify the surrounding work as required to complete the work, including changes under each alternate, only if acceptance is designated in the contract.

10. Unit Prices (see UGC 11.2 and paragraph 5.4.2 of CSP contract)

The Contractor shall provide unit prices for specific portions of the work identified by the Owner during the pre-bid process. Unit pricing shall include all costs of materials, including, but not limited to shipping, and their related labor cost, including, but not limited to all appropriate burdens and markups.

11. Applications for Payment (see UGC Article 10 and 12.3 as well as Article 12 of the CSP contract)

- 11.1 Such requests shall be presented on (AIA) style G702 & G703 Pay Application forms. The G702 & G703 forms which may be supplemented with columnar continuation sheets shall separately identify each update to the original contract or GMP amounts.
- 11.2 The Contractor's project accounting records shall be kept on the basis of generally accepted accounting principles in accordance with cost accounting standards issued by the Federal Office of Management and Budget Cost Accounting Standards Board and organized by each pay request period.
- 11.3 Prior to the submission of the initial Application for Payment the Contractor shall submit the following documents to the A/E and Owner for review:
 - 11.3.1 Contract Price of GMP Schedule of Values: A single document itemizing the breakdown of the Contract Price/GMP, including general conditions, contingencies and allowances shall be submitted using HCC standard Schedule of Values format. The Contractor shall submit a draft breakdown and such submittal shall be a condition precedent to the processing of the first pay application. The Contractor shall submit subsequent draft copies of the Schedule of Values no later than five (5) working days prior to formal submission of each monthly pay request.

- 11.3.1.1 The breakdown shall follow the trade divisions of the specifications.
- 11.3.1.2 No adjustment to the original detailed breakdown of the contract line item shall be made once accepted by the Owner and A/E, unless such adjustment is directed by the Owner in writing.
- 11.3.1.3 Construction Manager or Design-Builders will be allowed to reallocate among General Conditions line items after consultation with, and agreement from, the Owner. In the event the contractual limits on General Condition's costs are exceeded, the overruns shall be subtracted from the Fee.
- 11.3.2 The Contractor shall not use subcontractor invoices/pay applications in lieu of a single Schedule of Values from the Contractor.
- 11.3.3 The breakdown shall anticipate future Change Orders and make provisions for incorporating all changes into the breakdown listing. If issued, Change Orders shall be identified separately and shall itemize the GMP Change Orders, Change Proposals and/or Field Orders, which are incorporated into each Change Order for payment on a line-item basis. Contracts with Guaranteed Maximum Price proposals shall repeat the process outlined in this section every time a subcontract is added to the monthly Schedule of Values for payment.
- 11.3.4 Submission and approval of Construction Staging Plans, Parking Plans, Quality Control Plans and Trenching Plans are a prerequisite for starting Work at the site and for receiving the first monthly partial payment.
- 11.4 At a minimum, the Contractor shall provide attachments to each month's payment request as follows:
 - 11.4.1 Four copies of the monthly Small Business Progress Assessment reports.
 - 11.4.2 Four copies of the updated Submittal Schedule.
 - 11.4.3 Four copies of all invoices required by the contract.
 - 11.4.4 Four copies of the certified wage rate notification form for each member of the workforce not previously submitted.
 - 11.4.5 Four copies of the updated RFI and ASI logs.
 - 11.4.6 Four copies of the updated Work Progress Schedule as specified herein.
- 11.5 All regular monthly applications for payment shall be submitted to the Owner and A/E for review and approval in draft form no less than five working days prior to the formal submission. The Contractor shall be prepared to review the draft copy at the project site, or at such other location as may be agreed to by the parties. Failure to comply with the requirements outlined in this section shall relieve the Owner from its obligation to make payments on any/all line items until the Contractor meets all requirements.
 - 11.5.1 Payments cannot exceed the contract, work in-place, or subcontract amounts as noted on the Schedule of Values line items.
 - 11.5.2 All as-built drawings shall be up to date and available for review by the A/E and Owner.
 - 11.5.3 When requesting payment for materials stored off site, all such materials shall be specifically identified, including supporting documentation, photos and insurance. The Contractor should be available to escort the Owner to visit and personally verify the stored materials in a physically separated and secure area.
- 11.6 Request for payments in association with release of, or reduction in retainage, or completion of work have additional requirements outlined in the UGC.

12. Procurement of Subcontracts (Applies to Construction Manager at Risk and Design-Build Contracts Only) – (see 5.6 & 5.7 of the CM@R contract)

- 12.1 The Construction Manager at Risk (CM) or Design/Build Contract (DB) shall provide a written Bid/Proposal Package Strategy (B/PPS) for procuring subcontracts including self-performance work (other than General Conditions), prior to the approval of the Guaranteed Maximum Price, but no later than twenty calendar days prior to the first advertisement for subcontractor proposals. The B/PPS shall be a written plan submitted to, and reviewed by the Owner.
 - 12.1.1 The plan shall identify bid packages that are most advantageous to the Project and

align with the CM/DB's HCC SB Good Faith Effort by providing at least three qualified respondents (including CM/DB). Each bid package shall include the UGC, Owner's Division 1 Specifications, Drawings and Specifications and any other HCC requirements included in the CM/DB Contract pertaining to the scope of work covered in the packages.

- 12.1.2 The B/PPS shall include the following for each bid package contemplated:
- Anticipated scope of work to be procured;
 - A current Work Progress Schedule;
 - Anticipated selection criteria and questions;
 - Self-perform work proposals to be submitted by the CM/DB;
 - Proposed advertising dates;
 - Proposed pre-proposal meeting(s) dates;
 - Proposed receipt, review and award dates;
 - Anticipated notice to proceed dates.
- 12.2 The CM/DB shall update the B/PPS monthly at a minimum, as conditions change, or as proposed dates are revised.
- 12.3 Per the Texas Higher Education Code 51.782: "A Construction Manager at-Risk shall publicly advertise, in the manner prescribed by HCC, and receive bids or proposals from trade contractors or subcontractors for the performance of all major elements of the work other than the minor work that may be included in the general conditions".
- 12.4 The goal of the Project Team shall be to have all work procured through advertised competitive proposals, however, if a "minor procurement" condition arises during the process, the following procurement guidelines may be used by the CM/DB, with Owner approval, for procurement of work: Less than \$5,000.00 No requirements Between \$5,000.01 to \$25,000.00 Obtain three solicitations Greater than \$25,000.00 Advertised competitive proposals If the CM does not receive at least three competitive proposals on procurements over \$5,000.00, the CM shall re-package the scope and reissue the proposal without additional cost to the Owner, or delay to the project "Substantial Completion" date. This solicitation requirement does not pertain to Change Orders to existing subcontracts.
- 12.5 Work shall be divided into reasonable lots; however, material and labor acquired through purchase order/vendor type contracts are subject to the entire project (i.e. Concrete material shall be procured as a unit price time an estimated total project quantity provided by the CM/DB to equal a total construction cost). Work shall not be incrementally divided for the purpose of circumventing the procurement guidelines of 12.4 above.
- 12.6 The CM/DB may establish selection criteria for each phase of work for review and approval by the Project Team. Criteria shall be qualifications based and consistent with the information needed by the CM/DB to make a proper evaluation and selection. The CM/DB shall establish a selection matrix including cost, criteria, weighting and ranking procedures for evaluation and work with the Project Team to tailor the selection criteria to be project and scope specific to ensure the questions are proper and relevant to the goals of the project. SB participation/status cannot be used as criteria for determining "best value," only for determining if the respondent is responsive.
- 12.6.1 The CM/DB shall establish clear criteria and questions so that those reading the Request for Proposals will understand how they will be evaluated.
- 12.6.2 If criteria are not included in the advertisement for proposals, the proposal shall be considered a lump sum bid, and the CM/DB shall award the work to the lowest qualified, responsive bidder.
- 12.6.3 After selection criteria have been established, the CM/DB shall publicly advertise the work in general circulations and trade associations in accordance with TEC 51.782 for CM, Article 7 of the current Contract for DB and the Texas Administrative Code 111.14 –"HUB" for both CM and DB. This advertisement shall included, at a minimum, the following:
- HCC Project Number and Project Name;
 - Institution/Campus name;
 - CM/DB name and address;
 - CM/DB contract name and phone number;

- Location for viewing of plans and specifications;
 - Date, time and location of Pre-proposal meeting(s);
 - Date, time deadlines(s), and location for receiving proposals;
 - Instruction to respondents for submitting proposals;
 - Selection criteria, questions and submittal requirements.
- 12.7 At the time and location identified in the advertisement, the CM/DB shall hold a Pre-proposal meeting(s) for all potential subcontractors with the Project Team and Owner present. The CM/DB shall review the following at a minimum:
- The general scope of the project and specific scope of work included in this package;
 - Instructions to respondents for submitting proposals;
 - Selection criteria and questions;
 - HUB Good Faith Effort requirements;
 - Project safety requirements;
 - Project schedule requirements;
 - Payment procedures and requirements, including retainage;
 - Commissioning and Close-out requirements.
- 12.8 If the CM/DB identifies any self-performance in the B/PPS (work to be performed by its own employees), the CM/DB shall submit a proposal to the Owner at least 24 hours before the advertised time and location in a manner so as not to compromise the competitive process.
- 12.9 The CM/DB shall accept all proposals at the advertised location until the advertised deadline. Upon receipt, the Owner shall be allowed to review the proposal and confirm the time and date received. Any proposals received after the deadline shall not be considered by the CM/DB, and shall be returned to the respondent unopened. Fax proposals shall not be accepted unless the ODR, prior to the initial advertisement for proposals, approves a detailed plan by the CM/DB for proper care and custody.
- 12.10 After compiling, reviewing and verifying the costs and scope associated with all proposals, the CM/DB shall provide a "bid tabulation" matrix and a proposed Schedule of Values for review by the project team.
- 12.10.1 The bid tabulation matrix shall compare all equivalent scope proposals to the CM/DB's estimate.
- 12.10.2 Each matrix shall indicate the CM/DB estimate(s) for each scope of work and identify the respective cost savings/over-runs.
- 12.10.3 The CM/DB may use values/quantities from its own estimate to provide full scope comparisons between each respondent, however, these "plug" numbers shall be clearly identified in the matrix to the Project Team and be used only to compare various proposals.
- 12.10.4 The proposed updated Schedule of Values shall summarize all executed and recommended "best value" subcontracts to provide a current status of the Guaranteed Maximum Price Proposal.
- 12.10.5 Once the proposals are compiled into a bid tabulation matrix and the proposed Schedule of Values has been updated, the CM/DB shall request a meeting with the Project Team to review the proposals.
- 12.11 The CM/DB shall lead the proposal review meeting and identify any exclusions or conditions, identify any non-qualifying respondents and any other problems that may have occurred during the process.
- 12.11.1 The CM/DB shall confirm that the respondents are qualified, meet the established selection criteria, and identify the amount of the proposals.
- 12.11.2 The CM/DB shall identify the "best values" and the current status of the buyout savings to the project team. If the "best value" causes the CM/DB to exceed the Cost of Work line item, including contingencies in the GMP the CM/DB shall acknowledge that the overage will be deducted from the CM/DB's Construction Phase Fee.
- 12.12 Once the "best value" respondent has been identified by the CM/DB, without exception by the Owner, the CM/DB shall finalize negotiations with the selected "best value" respondent. If the CM/DB is unsuccessful in its negotiations with the selected respondent, the CM/DB shall notify the ODR that it intends to begin negotiations with the second "best value" and report the cost

implications to the Schedule of Values. Once negotiations are successfully completed the CM/DB shall notify the Owner in writing that it intends to write a subcontract to the selected "best value" respondent and identify the bid package number, value of the contract, along with any changes from the bid day value, changes in scope, report the current status of the GMP identifying the current savings/overages and provided a copy of the executed subcontract or purchase order prior to any request for payment by the CM/DB for applicable work.

- 12.13 The Owner reserves the right to object to the "best value" identified by the CM/DB and may conduct an evaluation of the selection process. If after evaluation the Owner disagrees with the CM/DB "best value" recommendation, the Owner may instruct the CM/DB to re-bid the scope of work or use the Owner's "best value" selection. If the value of the Owner's selection causes an increase in the Total Contract Price, the increase will be the responsibility of the Owner.
- 12.14 The process identified in this section shall be repeated for each bid package until the project is entirely bought-out.

13. Contractor Daily Reports

The Contractor shall provide the Owner with a report detailing its daily activities on the Project in a format acceptable to the Owner. All tests performed by the Contractor are to be attached to these daily reports. All work reports required of subcontractors shall be attached to the Contractor's daily report. As a minimum, the report shall include the following information as it relates to the day's activities on site: subcontractors on site, equipment on site, areas of work, type of work performed, materials received, tests performed, any injuries or accidents, any oral instructions received from the Owner or A/E, any material damage, any change in supervisory personnel and anything that might impact the projects quality or schedule. These reports shall be submitted to the Owner on a daily basis. Not receiving these reports in a timely manner may be grounds for the Owner withholding payments until they are submitted.

14. As-Built Drawings and Record Drawings (see UGC 10.3 and 11.4 as well as paragraph 25.7 of the CSP contract)

- 14.1 One copy of all record documents shall be kept up to date and available at the Project Site. "As-Built" drawings, specifications, detail manuals, and submittals shall be continuously annotated by the Contractor to reflect actual record field conditions, addenda, issuance of all Change Orders and clarifications, and actual dimensional records for underground and all other services. One copy of all approved submittals and material selections shall also be kept available.
- 14.2 Maintenance of current documentation by the Contractor is required in order to process pay applications. The Owner and A/E will review the status of such documentation monthly, at a minimum. Also refer to the Commissioning Procedures and Project Close-out Procedures for detailed instructions on As-Built drawings and specifications.

15. Utility Outages

- 15.1 The Contractor shall notify the Owner, in writing, of any planned utility outages ten business days in advance of the anticipated outage date. The notice shall identify the utility(s) to be shutdown, the anticipated duration of the outage and the subcontractor responsible for initiating and terminating the outage. The Owner has final authority to approve or disapprove of the requested outage date and time.
- 15.2 A standard form for processing a request for utility shutdown or any other disruption shall be provided by the Owner at the Pre-Construction Conference. The Contractor shall utilize this form, with attachments as necessary, in requesting an outage.

16. Coordination of Space (see UGC section 3.3 and 3.3.6.2 in particular. Also see paragraph 4.4 of the CSP contract)

- 16.1 The Contractor and subcontractors should coordinate the use of Project space and sequence of installation of mechanical, electrical, plumbing, HVAC and Communications work which is indicated diagrammatically on the drawings. The Contractor and subcontractors should follow routing shown for pipes, ducts, and conduits as closely as practicable, with due allowance for

available physical space. The Contractor and subcontractors should utilize space efficiently to maximize accessibility for other and future installations, maintenance and repairs. Making adjustments due to field conditions is considered a part of the work.

- 16.2 Within finished areas all pipes, ducts and wiring should be concealed, unless otherwise directed in the plans and specifications. The Contractor and subcontractors should coordinate locations of fixtures and outlets with finish elements.
- 16.3 The Contractor and subcontractors should verify that mechanical and electrical controls, valves, cut-offs, cleanouts, switches and other items are located in such a manner as to make them readily accessible to the user.
- 16.4 In no case shall locations of equipment be established by scaling the drawings. In the event exact dimensions are not provided with the drawings either supplemental instructions should be obtained from the A/E, or approval of placement from the Owner, should be obtained prior to final placement.
- 16.5 All work should be arranged in a neat and orderly manner while maximizing clearances.
- 16.6 All operating system components which will be approved through the submittal process should be reviewed prior to submittal to confirm there is physically adequate space to accommodate the device.

17. Repair of Damage (see UGC 3.3.11.3)

The Contractor shall be responsible for any loss or damage caused by Contractor, his workers or his subcontractors, to the Work, materials stored on site, to tools and equipment, to adjacent property and to persons. The Contractor shall make good any loss, damage or injury at Contractor's own expense and take particular care to protect adjacent buildings, utilities, landscape and lawn sprinkler systems.

18. Deliveries

- 18.1 The Owner will not accept delivery of products and materials bound for the Contractor. The Owner will not be responsible for material losses, or make arrangements to have someone present for acceptance of deliveries.
- 18.2 The name and address of Owner shall not be used for delivery of materials and equipment.
- 18.3 The Contractor should make arrangements for deliveries in accordance with construction schedules and in ample time to facilitate inspection prior to installation without causing delay to the project.

19. Protection of Utilities, Etc. (see UGC 3.3.11.3)

The Contractor and all subcontractors and vendors should take precaution to protect and leave intact the streets, site and work previously accomplished, including buildings, streets, utility poles, fire hydrants, utility lines, catch basins and storm drainage systems.

Section 013200 Project Planning and Scheduling (see UGC Article 9 and Section 5.3 of the CSP contract)

1. Definitions:

- 1.1 Project Schedule (a.k.a. Work Progress Schedule) – the schedule developed, monitored Construction phases of the project.
- 1.2 Project Team – refers to the Owner, Architect/Engineer (A/E), Design Consultants, Users, Contractor and Subcontractors that are contracted and/or specifically assigned to the Project.
- 1.3 Work Day – refers to a day in which work is planned, excluding weekends and legally recognized state holidays.
- 1.4 Critical Path – is the sequence of activities that determines the longest duration for the project when the Total Float is equal to, or less than zero.
- 1.5 Total Float – the number of days an activity on the longest path can be delayed without delaying the Substantial Completion Date. Total float should not be shown as a single activity, but rather the relationship between the early and late finish dates or early and late start dates of each activity.

2. Purpose

- 2.1 Time is an essential part of this contract. Therefore, the timely and successful completion of the Work requires careful planning and scheduling of all activities inherent in the completion of the project.
- 2.2 The Contractor shall participate with the Owner and A/E in a project planning workshop promptly upon execution of the contract unless specified differently in the Construction Documents. The Schedule shall be coordinated with the Contract Price Breakdown, or Schedule of Values, and shall include all significant procurement actions (including long lead time delivery items and related approval activities), all work placement activities (including start and completion dates), identification of the timing of overhead inspections, system startup and commissioning activities, pre-final and final inspections, and punch list corrections as a minimum.
- 2.3 Acceptance of the Project Schedule; or any subsequent update thereof, by the Owner is for format and extent of detail of the Project Schedule only. Such "acceptance" does not indicate approval of the Contractor's means or methods, or of any change to the contract terms including without limitation any required contract milestones.
- 2.4 The Project Schedule shall be developed with a certain amount of float time. This float, which shall be no less than ten percent of the total duration of the project, shall be presented in a format which facilitates reporting of progress and trends and can be used to identify risk and opportunities, project upcoming activities and forecast project milestones.
- 2.5 The Owner must be able to reasonably rely on the Contractor's Project Schedule in order to make accurate commitments to the Project Team, campus administration and other parties as necessary.

3. Contractor Responsibilities

- 3.1 The Contractor is responsible for planning, managing, coordinating and scheduling all activities from a Notice to Proceed to Final Completion of the project within the time allotted by the contract.
- 3.2 The Contractor is responsible for keeping the Owner and Project Team fully informed of schedule status and upcoming activities throughout the project.
- 3.3 The Contractor's Pre-Construction and Construction project management personnel shall actively participate in the planning and development of the Project Schedule and shall be prepared to review such development and progress with the Owner, A/E and any other members of the Project Team so the planned sequences and procedures are clearly understood by all parties.
- 3.4 The Contractor is to plan for appropriate activity durations to allow for thorough review, procurement, submittal, installation, inspection, testing and commissioning of all work in order to confirm compliance with the project plans and specifications.

4. Schedule Development Requirements

- 4.1 Appropriate logic relationships must be in place and complete, while the Project Schedule shall be free of any mandatory and/or late finish constraints, except for the Substantial Completion Date.
- 4.2 The estimated activity duration of an activity shall be expressed in work days only.
- 4.3 During Pre-Construction Services, the Project Team will establish the maximum duration for every activity included in the schedule.
- 4.4 The Project Schedule should be coordinated with the Contractor's Submittal Schedule and Schedule of Values.

5. Planning and Scheduling Workshop

- 5.1 Within fifteen calendar days after the Notice of Proceed is issued the Contractor will conduct a Planning and Scheduling Workshop with the Contractor's Project Manager, Superintendent, the Owner, A/E, User Representative and any available subcontractors prior to submitting the initial Project Schedule to the Owner.
- 5.2 Two separate Planning and Scheduling Workshops should be held with the aforementioned parties prior to the Contractor submitting the baseline Preconstruction Project Schedule.

- 5.3 The baseline schedule shall be submitted within 10 work days after the Planning and Scheduling Workshops are complete.

6. Construction Phase Baseline Schedule Submittal

- 6.1 The Baseline Project Schedule shall be submitted to the Owner with the required Total Float and a current data date (within five days of the date of submission). The Baseline Schedule will be updated within ten days of the date when each subcontractor is procured and brought on to the project.
- 6.2 Once the full scope of the Project has been approved (i.e. the last stage GMP Change Order has been executed), the Project Manager shall coordinate with the Owner to reset the Baseline Project Schedule.
- 6.3 The Owner reserves the right to withhold any and all payments related to the Project Schedule and/or General Conditions if a Baseline Project Schedule is not submitted, or is not acceptable to the Owner.
- 6.4 The Project Schedule shall be presented in a graphic time-scaled view including all activities, early start and finish dates, estimated durations and total float, sorted by early start.

7. Updating the Project Schedule

- 7.1 Once the Baseline Project Schedule has been accepted, the Project Manager shall update the Project Schedule on at least a monthly basis and submit the updated Project Schedule with the draft application for payment.
- 7.2 Project Schedule updates shall be based on actual work progress, current logic and remaining durations.
- 7.3 Total Float is intended to be used proportionally with the duration of the project; therefore, there should be no remaining Total Float at the actual Substantial Completion Date.

8. Excusable Delays and Time Extensions

- 8.1 Excusable delays shall be administered per the UGC.
- 8.2 If an excusable delay extends the Contract Substantial Completion Date, the ODR may extend the contract time by the number of excusable calendar days lost on the Project Schedule, or take other actions as appropriate under the terms of the contract.
 - 8.2.1 Any Change Order Proposal that the Contractor claims, or will claim, justifies an extension of contract time must contain the information necessary to justify the time extension.
 - 8.2.2 Change Order Proposals that do not affect the Critical Path for the Project and delay the Substantial Completion Date, or does not include a request for additional time prior to approval by the ODR, shall not be due a time extension.
- 8.3 Once the ODR accepts a time extension, and authorizes the Contractor to proceed with the contract change, the proposed revision shall be incorporated in the Project Schedule.

Section 013220 Photographic Documentation

1. Photographic Media

- 1.1 Digital Images: Provide images in uncompressed TIFF format produced with a minimum 4.0 mega pixels and image resolution of not less than 1024 by 768 pixels.
- 1.2 Videotape Format: Provide high-quality ½" VHS color videotape in full size cassettes, 90 minutes long.

2. Construction Photographs

- 2.1 Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the work. Photos with blurry or out-of-focus areas will not be accepted.
- 2.2 Maintain key plan with each set of construction photos that identifies each photo location.
- 2.3 Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
- 2.4 Date and Time: Include date and time filename for each image.
- 2.5 Preconstruction Photos: Before commencement of work on the project take digital photos of the project site and surrounding properties, including existing items to remain during

construction, for different vantage points.

2.6 Take photos to show existing conditions adjacent to the project site.

- 3. Construction Videos** - Preconstruction Videotapes: Before starting construction on the project site prepare a video recording of the site and surrounding properties from different vantage points. Show existing conditions of the site and adjacent buildings. Show protection efforts by Contractor including, but not limited to, tree protection and storm water controls.

Section 013520 LEED Requirements (If LEED PROJECT)

1. Definitions - LEED – Leadership in Energy and Environmental Design.

2. Submittals

The Contractor shall provide preliminary submittals of its LEED Action Plan, indicating how the Owner's requirements will be met, within thirty days after the Start date established by the Notice to Proceed. Submit additional LEED submittals required by other specification sections.

3. Quality Assurance

LEED Coordinator: Engage an experienced LEED-Accredited Professional to coordinate LEED requirements. LEED coordinator may also serve as waste management coordinator.

Section 013523 Project Safety Requirements (see UGC Article 7 and Section 5.8 of the CSP contract)

1. Purpose

- 1.1 The Contractor shall bear overall responsibility for all aspects of safety at the project.
- 1.2 The Contractor shall, at all times, provide adequate resources, equipment, training and documentation to:
 - 1.2.1 Assure compliance with all applicable regulatory and contract requirements.
 - 1.2.2 Assure a safe work environment at the Project.
 - 1.2.3 Instill a culture for safe behavior in all supervisors and workers.
 - 1.2.4 Ensure a universal understanding that safety and health issues take precedence over all other considerations at the Project.
- 1.3 The Contractor and every subcontractor shall comply with the requirements of this section and all Federal, State, and local statutes, standards, and regulations. In any circumstance where this Section differs from, or is in conflict with any statutory requirement, the more stringent shall apply.
- 1.4 The Owner reserves the right to have any manager, supervisor or worker removed from the project for disregarding the Project's safety requirements.
- 1.5 The Owner reserves the right to deduct from the contract any safety related expenses that the Owner incurs as a result of the Contractor's, or any subcontractor's, failure to comply with the requirements of this section.
- 1.6 The Owner will deny requests for time extensions and/or monetary considerations whenever the Owner intercedes on behalf of safety compliance as a result of Contractor failure to act as required by the contract.

2. Contractor's Project Safety Coordinator (PSC)

- 2.1 The Contractor shall provide a Project Safety Coordinator, who shall be responsible for safety training, inspections, investigations, record keeping, reporting, incident response, and claims management, and shall serve as the technical advisor to the Contractor's Project staff for all safety issues.
- 2.2 If the contract value is less than \$3,000,000 the Contractor's project superintendent may perform these duties. If the contract value exceeds \$3,000,000 the Contractor shall furnish a construction safety specialist.

3. Subcontractors' Project Safety Representative (PSR)

Every subcontractor shall identify one employee to be its Project Safety Representative who will be on-site during all the subcontractor's activities and will participate in all training activities, audits, etc. related to the safety program.

- 3.1 The PSR shall attend all safety meetings while the company is actively performing work at the project and shall be responsible for reporting all incidents to the PSC.
- 3.2 The PSR shall transport or accompany any injured co-worker that requires medical attention at facilities outside the project.
- 3.3 The PSR shall be responsible for either conducting or making arrangements for all training, equipment and materials that workers need to perform their duties in the safest possible manner.

4. Project Safety Program

- 4.1 The Contractor shall develop a written, site specific, safety program. It shall be printed in English and an initial draft shall be submitted to the Owner for review and comment as a prerequisite to issuance of the Notice to Proceed with construction services'
- 4.2 The Contractor shall incorporate Owner comments into a final draft which shall be resubmitted to the Owner for concurrence.

5. Personal Protective Equipment (PPE)

- 5.1 PPE shall be required for all workers in construction areas. The followings items shall be furnished, inspected, and maintained by the employer. The Contractor shall maintain an adequate inventory to furnish these items for five Owner representatives who may visit the project from time to time:
 - 5.1.2 Hard Hats (safety helmets): shall be ANSI stamped (Z89.1-1997, Type I, Class E, G and C and be worn at all times while in the construction areas.
 - 5.1.3 Eye protection (safety glasses): shall be ANSI stamped Z87. If a worker wears prescription glasses (plastic lenses only) that are marked Z87, the employer shall furnish goggles or safety glasses that are designed to fit over another pair of glasses and be worn at all times while in the construction areas.
 - 5.1.4 Vests shall be at a minimum a Class II reflective traffic vests and be worn at all times while in the construction areas.
 - 5.1.5 Hand protection, Hearing Protection, Respiratory Protection, Fall Arrest Equipment, Other PPE: shall all be furnished as required to comply with OSHA Standards.

6. Medical Equipment - The Contractor shall maintain at least one first aid kit on the project site at all times per ANSI Z308.1.

7. Certifications

Supervisors, Competent Persons, Equipment and Crane Operators, and Emergency Responders shall all be identified in lists submitted by employers to the PSC prior to commencement of work. In addition to lists, the employers shall include copies of all available training certificates or formal documentation to support the declared positions. For all operations that require a "competent person" (per OSHA definition), the PSC shall maintain a project file containing the transmittals from each employer naming each person declared to be competent for each operation. For operations requiring independent certification, a copy of the certificates shall be attached.

8. Project Safety Signs and Posters

- 8.1 The Contractor shall post safety regulation signs at every point of entry to the project in English and Spanish. The content of the sign should at a minimum indicate that visitors are required to check in at the project office, persons entering the construction area must be appropriately attired, no weapons, tobacco, alcohol, controlled substances and related paraphernalia may be brought onto the premises, a posted speed limit will be identified and copies of the MSDS sheets are available at the project office.
- 8.2 The Contractor shall post emergency contacts and notification, including phone numbers,

notification of insurance carrier for Worker's Compensation Coverage and any and all other required State and Federal postings.

9. Project Safety Training and Meetings

- 9.1 Within fifteen days of the issuance of the Notice to Proceed the Contractor shall hold the initial safety meeting and all Project Team members are strongly encouraged to participate.
- 9.2 The PSC shall present orientation training to every person who is to be allowed into the construction area without an escort. A translator shall be present when there are workers in attendance who do not speak English.
- 9.3 The PSC shall maintain a site safety orientation log signed by all persons receiving safety training.
- 9.4 Project safety meetings will be held on a weekly basis and will be chaired by the PSC and attended by all companies' PSRs who are currently on site. The topics of discussion should focus on safety and loss control issues.
- 9.5 "Tool Box Talks" shall be conducted on a weekly basis by each PSR and will cover safety issues related to upcoming work, current site conditions and review of any recent incidents.
- 9.6 Special task training should occur when new equipment or non-routine activities are scheduled.

10. Safety Inspections

- 10.1 Daily – The PSC shall observe work operations in all areas of the project and note any violations in the daily progress reports.
- 10.2 Weekly – A comprehensive safety inspection shall be conducted by the PSC and each PSR for their respective work areas. A written record of the observations and recommended corrections should be made and placed in the project files.
- 10.3 Quarterly – The PSC shall facilitate an inspection which shall include, but not be limited to the following: fall arrest equipment, fire extinguishers, rigging, ladders, hand tools, power tools, cords, welding leads, hoses, alarms, respirators, ground fault circuit interrupters, first aid stations, eye wash stations, and emergency rescue equipment.
- 10.4 Semi-annually – The PSC shall facilitate an inspection of all hoists, cranes, mobile equipment, motorized lift platforms, stages, generators and compressors to assure proper operational condition.
- 10.5 The PSC shall notify the Owner within one hour of the arrival at the project site by any representative of a regulatory agency and provide the Owner with a copy of any published findings or citations issued to any employer and shall ensure that statutory posting requirements are met.

11. Records and Reports - The PSC shall prepare a written report for each incident that involves any injury that may not be resolved by first aid response and/or each incident that involves damage to property or equipment. The report should contain a list of factual details that created the incident, the responsive actions that occurred during and immediately following the incident and recommendations for modifications to prevent repetition of the incident. A copy of the report should be submitted to the Owner within 24 hours of the incident.

12. Construction Operations

- 12.1 Cranes
 - 12.1.1 Tower cranes and related power supply equipment shall be surrounded by at least an eight foot high, 5/8" plywood enclosure with lock controlled entrance.
 - 12.1.2 Operators of cranes, derricks and/or hoisting equipment shall possess certification from a nationally accredited training organization.
- 12.2 Demolition - Safe egress paths and barrier isolation of impacted areas shall be monitored and maintained to prevent entry by other trades and members of the public. This includes removal of materials and trash from elevated locations.
- 12.3 Electrical Power
 - 12.3.1 Ground fault circuit interruption (GFCI) shall be the primary protection from exposure to electrical current for all workers on the project. Only exit lighting and medium-high

(greater than 240) voltage service will not be GFCI protected.

12.3.2 All strings of temporary lights shall be fully lamped and guarded regardless of height, and shall be continuously maintained. Adequate levels of illumination for the work operations must be maintained at all times.

12.3.3 All receptacles and switches shall have trim plates installed before they are energized.

12.3.4 All power distribution panels shall have full covers installed before primary power is brought into the panel.

12.4 Excavations

12.4.1 Prior to starting, each excavation shall be reviewed with the Owner to obtain any historical knowledge about existing utilities in the area. Where applicable, "utility locates" will be called for seventy two hours in advance of commencement of the excavation. Potholing and/or hand excavation shall be required within two horizontal feet of located centerlines and in areas where knowledge is lacking.

12.4.2 When a trench excavations cannot be backfilled in the same day as it is created, a highly visible barricade shall be erected no less than six feet from all approachable edges. All portable means of access shall be removed at the end of each workday.

12.4.3 Earth ramps that are to be used for walking access shall not exceed twenty percent in grade slope. Steeper slopes shall be gated and used for equipment only.

12.5 Fall Protection and Prevention

12.5.1 Any walking/working surface shall be defined to have a fall exposure that has one or more sides, ends or edges without a guardrail system attached or a solid continuous wall of at least forty-two inches in height above the walking/working surface, and within twelve horizontal inches from the edge. The Contractor shall require engineered or conventional fall protection measures for each and every fall exposure that involves vertical distances equal to or greater than six feet. The recognized exemptions/exceptions are as follows:

- Portable step ladders
- Extension and straight ladders
- Erection and dismantling of scaffolding
- Limited exposure for engaging and disengaging a hook
- Vertical fall exposure protected by a warning line and six foot setback

12.5.2 Provide covers over holes which are secured and clearly marked as covers.

12.5.3 Job built ramps and bridges must be covered with non-skid materials.

12.5.4 Materials, scraps, waste and tools shall never be allowed to freefall from a height greater than twenty feet, unless it is contained within a chute or controlled by a hoist.

12.6 Fire Protection

12.6.1 The Contractor shall review fire prevention needs and procedures with the Owner and shall post appropriate information and warnings.

12.6.2 The Contractor shall maintain unobstructed access to fire extinguishers, temporary fire protection facilities, stairways and other access routes.

12.6.3 The Contractor shall provide supervision of welding operations, combustion type temporary heating units and similar sources of ignition.

12.6.4 All floors that have combustible materials present shall be accessible from ground level by a usable stair system. For structures greater than three stories in height shall have a fire sprinkler stand pipe installed and it shall be charged to within two stories (or thirty vertical feet) of all floors containing combustible materials. A Siamese connection shall be installed at every second level to provide access for fire hoses.

12.6.5 All fire extinguishers that are not task-specific shall be adequate in number and description to comply with OSHA declared limits for egress points, floor area and travel distances. They shall be situated in highly visible locations.

12.6.6 All fire extinguisher that are task specific shall be inspected and furnished in advance by the employer that will be conducting the work that requires such fire fighting provisions. Such extinguishers

- 12.7 Housekeeping - The Contractor shall ensure that all subcontractors effectively clean the project site continuously throughout each workday. Effective cleanup shall address all of the following housekeeping issues:
 - 12.7.1 All construction waste, trash, and debris shall be placed in designated receptacles. No glass bottles will be permitted on the project site.
 - 12.7.2 Stack all whole and scrap materials in locations that do not obstruct a clear pathway nor create a risk of toppling causing injury or damage to the work.
 - 12.7.3 Place all hoses, cords, cables and wires in locations that prevent them from being damaged by tires, sharp edges, or pinch points and from creating trip or hook hazards.
 - 12.7.4 Secure and effectively cover all materials on roofs and elevated levels to prevent displacement by wind.
 - 12.7.5 All materials and equipment shall be protected from the elements while staged on the project site.
 - 12.7.6 All signs, barricades, fire extinguishers, guardrails, gates, etc. are to be restored to their proper locations in sound condition after they have been moved for work purposes.
 - 12.7.7 Properly store and secure all flammable and combustible liquids and gases.
 - 12.7.8 Collect and place all cut-off or waste pieces of rolling stock into waste and scrape containers as they are created.
 - 12.7.9 Live rounds ejected from powder-actuated tools shall be immediately placed in designated containers and periodically returned to the tool dealer or law enforcement agency for proper disposal.
 - 12.7.10 All puncture and impalement exposures shall be covered or eliminated as soon as they are created.
- 12.8 Ladders
 - 12.8.1 Portable aluminum ladders are prohibited.
 - 12.8.2 Extension, straight and job built ladders shall be secured from movement at the top and bottom.
 - 12.8.3 Manufactured portable ladders shall display ANSI heavy duty rating (Class 1-A) and be inspected daily.
- 12.9 Medical Assistance and Screening
 - 12.9.1 The PSC shall maintain a First Aid Log for all treatment administered on the project.
 - 12.9.2 Drug and alcohol screening shall be mandatory for every supervisor and/or worker who sustains or contributes to the cause of any injury (beyond first aid) or property damage incident.
 - 12.9.3 Minimum requirements for chemical screening shall at least match the threshold limits for a NIDA 5-panel protocol and for alcohol screening shall at least match the Texas DOT vehicle operator's limit for blood alcohol content.
 - 12.9.4 Any supervisor or worker who tests positive shall be ejected and excluded from return to work at the project. Successful completion of an acceptable rehabilitation program may be considered by the Owner for restoring a person's ability to return to the project. The final decision rest solely with the Owner.
- 12.10 Petroleum Fuel Operated Equipment
 - 12.10.1 Where possible, equipment operator cabs shall be locked during non-working hours. Only equipment operators and direct supervisors shall have access to keys.
 - 12.10.2 Any combustion engine equipment with less than ninety-eight percent clean air exhaust shall not be operated in enclosed spaces unless the exhaust is piped to outside air, and fresh air is brought into the space to replace the amount being consumed. This includes generators/welders and compressors as well as mobile equipment.
 - 12.10.3 For hose and termination fittings on air compressors, whip checks shall be used at all connection points. Emergency shut off valves shall be installed on every discharge fitting of all air compressors.
- 12.11 Public Protection - The public boundary perimeter shall be secured from public intrusion. Attractive nuisance items such as tower cranes, tall ladders, fire escapes, large excavations, etc. shall require additional and separate security measures.

- 12.12 Project Service Water
 - 12.12.1 Potable water: comply with city health requirements.
 - 12.12.2 Non-potable water: Water storage containers, hose bibs and faucet shall be posted in English and Spanish "Danger – Do Not Drink"
- 12.13 Welding and Burning
 - 12.13.1 Oxygen and fuel gas cylinders shall not be stored together, including on bottle carts. At the end of any workday bottles must be moved to OSHA prescribed storage arrangements.
 - 12.13.2 Anti-flashback arrestors shall be installed at the pressure regulator gauges of all Oxy-Acetylene cutting rigs.
 - 12.13.3 Welding operations shall not be allowed to present an opportunity for flash burn exposures to the eyes of any workers in the vicinity. All welding operations shall provide appropriate screening measures, erected in advance to contain the high energy light.

Section 014200 Reference Standards

1. **Governing Regulations/Authorities** - The Architect/Engineer (A/E) has contacted the appropriate authorities having jurisdiction for the listed regulations and codes to obtain information for preparation of the Construction Documents. The Contractor may contact the authorities having jurisdiction directly for information and decisions having bearing on the work. **Refer to the coversheet of the plans issued for construction to identify the appropriate authorities having jurisdiction.**
2. **Standards**
 - 2.1 Reference to standards, codes, Specifications, recommendations and regulations refer to the latest edition or printing prior to the date of issue of the Construction Documents.
 - 2.2 Applicable portions of standards listed that are not in conflict with the Construction Documents are hereby made a part of the Specifications
 - 2.3 Modifications or exceptions to Standards shall be considered as amendments and unmodified portions shall remain in full effect. In cases of discrepancies between standards, the more stringent requirements shall govern.
 - 2.4 Copies of Standards: Each entity engaged in construction of the Project is required to be familiar with industry standards applicable to its respective construction activity. Copies of applicable standards are not bound with the Construction Documents. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.

3. Schedule of Standards

AA Aluminum Association
1525 Wilson Blvd. Suite 600
Arlington, VA 22209
703.358.2960
Fax 703.358.2961
www.aluminum.org

AABC Associated Air Balance Council
1518 K St. NW
Washington, DC 20005
202.737.0202
www.aabchq.com

AAMA American Architectural Manufacturers Assoc.
1827 Walden Office Square, Suite 550
Schaumburg, IL 60173-4268
847.303.5664
Fax 847.303.5774
www.aamanet.org

AAN American Association of Nurserymen
1250 Eye St., NW, Suite 500
Washington, DC 20005
202.789.2900

ANLA American Nursery and Landscape Association
1000 Vermont Ave., NW, Suite 300
Washington, DC 20005-4914
202.789.2900
www.anla.org

AASHTO American Association of State Highway and Transportation
Officials
444 North Capitol St., Suite 225
Washington, DC 20001
202.624.5800
www.transporation.org

ACI American Concrete Institute
38800 Country Club Dr.
Farmington Hills, MI 48331
248.848.3700
Fax 248.848.3701
www.aci-int.org

ACIL American Council on Independent Laboratories
1629 K St. NW
Washington, DC 20006
202.887.5872
www.acil.org

ACPA American Concrete Pipe Association
1303 West Walnut Hill Lane, Suite 305
Irving, TX 75038-3008
972.506.7216
Fax 972.506.7682
www.concrete-pipe.org

ADC Air Diffusion Council
1901 N. Roselle Rd., Suite 800
Schaumburg, IL 60195
847.706.6750
Fax 847.706.6751
www.flexibleduct.org

AF&PA American Forest & Paper Products
(Formerly National Forest Products Assoc. (NFPA))
1111 Nineteenth St., NW, Suite 800
Washington, DC 20036
800.878.8878
Fax 202.463.2700
www.afandpa.org

AI Asphalt Institute
2696 Research Park Dr.
Lexington, KY 40512-4052
606.288.4960
<http://www.washpaltinstitute.org>

AIA American Institute of Architects
1735 New York Ave. NW
Washington, DC 20006
202.626.7300
www.aia.org

AIHA American Industrial Hygiene Assoc.
P 2700 Prosperity Ave., Suite 250
Fairfax, VA 22031
703.849-888
www.aiha.org

AISC American Institute of Steel Construction
One East Wacker Dr., Suite 3100
Chicago, IL 60601-2001
312.670.2400
www.aisc.org

AISI American Iron and Steel Institute
1140 Connecticut Ave., NW, Suite 705
Washington, DC 20036
202.452.7100
www.steel.org

AITC American Institute of Timber Construction
7012 S. Revere Parkway, Suite 140
Centennial, CO 80112
303.792.9559
303.792.0669
www.aitc-glulam.org

ALI Associated Laboratories, Inc.
500 S. Vermont St.
Palatine, IL 60067
800.685.0026
www.associatedlabs.org

ALSC American Lumber Standards Committee
P.O. Box 210
Germantown, MD 20875
301.972.1700
www.alsc.org

AMCA Air Movement and Control Assoc.
30 W. University Dr.
Arlington Heights, IL 60004-1893
847.394.0150
www.amca.org

ANSI American National Standards Institute
1819 L St., NW, 6th Fl.
Washington, DC 20036
202.293.8020
Fax 202.293.9287
www.ansi.org

APA American Plywood Assoc.
7011 S. 19th
Tacoma, WA 98466
253.565.6600
Fax 253.565.7265
www.apawood.org

ARI Air Conditioning and Refrigeration Institute
4100 North Fairfax Dr., Suite 200
Arlington, VA 22203
703.524.8800
Fax 703.528.3816
www.ari.org

ARMA Asphalt Roofing Manufacturers Assoc.
Public Information Dept.
1156 15th St., NW, Suite 900
Washington, DC 20005
202.207.0917
Fax 202.223.9741
www.asphaltroofing.org

ASA Acoustical Society of America
2 Huntington Quadrangle, Suite 1N01
Melville, NY 11747-44502
516.576.2360
Fax 516.576.2377
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Date 3/02/09
www.asaa.aip.org

ASC Adhesive and Sealant Council
7979 Old Georgetown Rd. Suite 500
Bethesda, MA 20814
301.986.9700
Fax 301.986.9795
www.ascouncil.org

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers
1791 Tullie Circle, NE
Atlanta, GA 30329
404.636.8400
Fax 404.321.5478
www.ashrae.org

ASME American Society of Mechanical Engineers
Three Park Ave.
New York, NY 10016-5990
800.843.2763
www.asme.org

ASPE American Society of Plumbing Engineers
8614 Catalpa Ave., Suite 1007
Chicago, IL 60656-1116
773.693.2773
Fax 773.695.9007
www.aspe.org

ASSE American Society of Sanitary Engineers
901 Canterbury, Suite A
Westlake, OH 44145
440.835.3040
Fax 440.835.3488
www.asse-plumbing.org

ASTM American Society for Testing and Materials
100 Barr Harbor Dr.
West Conshohocken, PA 19428-2959
610.832.9500
Fax 610.832.9555

AWCMA American Window Covering Manufacturers Assoc.
355 Lexington, AVE, 17th Fl.
New York, NY 10017
212.297.2122
Fax 212.370.9047
www.wcmanet.org

AWI Architectural Woodwork Institute
46179 Westlake Dr., Suite 120
Potomac Falls, VA 20165
571.323.3636
Fax 571.323.3630
www.awinet.org

AWPA American Wood-Preservers' Assoc.
P.O. Box 361784
Birmingham, AL 35236-1784
205.733.4077
www.awpa.com

AWPB American Wood Preservers Bureau
4 D. Washington, St
Newnan, GA 30263
404.254.9877

AWS American Welding Society
50 N.W. LeJeune Rd.
Miami, FL 33126
800.443.9353
Fax 305.443.9353
www.aws.org

BHMA Builder's Hardware Manufacturers Assoc.
355 Lexington Ave., 15th Fl.
New York, NY 10017
212.297.2122
Fax 212.370.9047
www.buildershardware.com

BIA The Brick Industry Association
1850 Centennial Park Dr., Suite 301
Reston, VA 20191
703.620.0010
Fax 703.620.3928
www.bia.org

BIFMA Business and Institutional Furniture Manufacturers Assoc.
2680 Horizon, Dr., SE, Suite A-1
Grand Rapids, MI 49546-7500
616.285.3963
Fax 616.285.3765
www.bifma.org

CFFA Chemical Fabrics & Film Assoc., Inc.
c/o Thomas Assoc., Inc
1300 Sumner Ave.
Cleveland, OH 44115-2851
216.241.7333
www.chmicalfabricsandfilm.com

CISCA Ceiling and Interior Systems Construction Assoc.
5700 Old Orchard Rd., 1st Fl.
Skokie, IL 60077
708.965.2776
www.cisca.org

CISPI Cast Iron Soil Pipe Institute
5959 Shallowford Rd., Suite 419
Chattanooga, TN 37421
615.892.0137
Fax 615.892.0817
www.cispi.org

CRI Carpet and Rug Institute
P.O. Box 2048
Dalton, GA 30722
706.278.8835
Fax 706.278.8835 www.carpet-rug.org

CRSI Concrete Reinforcing Steel Institute
933 North Plum Grove Rd.
Schaumburg, IL 60173-4758
847.517.1200
Fax 847.517.1206
www.crsi.org

CTIOA Ceramic Tile Institute of America
12064 Jefferson, Blvd.
Culver City, CA 90230-6219
310.574.7800
Fax 310.821.4655
www.ctioa.org

DHI Door and Hardware Institute
14150 Newbrook Dr., Suite 200
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Date 3/02/09
Chantilly, VA 20151
703.222.2010
Fax 703.222.2410
www.dhi.org

ETL ETL Testing Laboratories, Inc.
P.O. Box 2040
Route 11, Industrial Park
Cortland, NY 13045
607.753.6711
www.etl.com

ECDS Energy Conservation Design Standards for New State Buildings
State Energy Conservation Office
Texas Facilities Commission
P.O. Box 13047
Austin, TX 78711-3047

WFGMA Flat Glass Marketing Assoc.
(The Flat Glass Marketing Assoc. included Glass Tempering Association, and members of the Laminators Safety Glass Association consolidated to form the Glass Assoc. of North America)
2495 SW Wanamaker Dr., Suite A
Topeka, KS 66614
785.271.0208
Fax 785.271.0166
www.glasswebsite.com

FM Factory Mutual Research Organization
500 River Ridge
P.O. Box 9102
Norwood, MA 02062
617.762.4300

GA Gypsum Association
810 First St., NE #510
Washington, DC 20002
202.289.5440
Fax 202.289.3707
www.gypsum.org

HMA Hardwood Manufacturers Assoc.
400 Penn Center Blvd., Suite 350
Pittsburg, PA 15235
412.829.0770
Fax 412.829.0844
www.hmamembers.org

HPMA Hardwood Plywood Manufacturers Assoc.
1825 Michael Farraday Dr.
Reston, VA 20190
703.435.2900
Fax 703.435.2537
www.hpva.org

IBC International Building Code
International Code Council
500 New Jersey Ave., NW 6th Fl.
Washington, DC 20001-2070

IBD Institute of Business Designers
341 Merchandise Mart
Chicago, IL 60654
312.647.1950

ICC International Code Council
500 New Jersey Ave., NW, 6th Floor
Washington, DC 20001
888.422.7233
Fax 202.783.2348
www.iccsafe.org

IECC International Energy Conservation Coder
www.iccsafe.com

IEEE Institute of Electrical and Electronic Engineers
3 Park Ave., 17th Fl.
New York, NY 10016-5997
212.419.7900
Fax 212.752.4929
www.ieee.org

IESNA Illuminating Engineering Society of North American
120 Wall Street, Fl. 17
New York, NY 10005
212.248.5000
Fax 212.248.5017
www.iesna.org

IFC International File Code
www.iccsafe.org

IGCC Insulating Glass Certification Council
c/o ETL Testing Laboratories, Inc.
P.O. Box 9
Henderson Harbor, NY 13651
315.646.2234
Fax 315.646.2297
www.igcc.org

ILI Indiana Limestone Institute of American
400 Stone City Bank Bldg.
Bedford, IN 47421
812.275.4426
Fax 812.279.8682
www.iliai.com

IPC International Plumbing Code
www.iccsafe.org

ISA Instrument Society of America
67 Alexander Dr.
Research Triangle Park, NC 27709
919.549.8411
Fax 919.549.8288
www.isa.org

LIA Lead Industries Assoc., Inc.
Sparta, New Jersey
www.leadinfo.com

LPI Lightning Protection Institute
25475 Magnolia Dr.
P.O. Box 99
Maryville MO 64468
800.488.6864
www.lightning.org

MBMA Metal Building Manufacturers Assoc.
1300 Sumner Ave.
Cleveland OH 44115-2851
216.241.7333
Fax 216.241.0105
www.mbma.com

MCAA Mechanical Contractors Assoc. of America
1385 Piccard Dr.
Rockville, MD 20850
301.869.5800
Fax 301.990.9690
www.mcaa.org

MFMA Maple Flooring Manufacturers Assoc.
60 Revere Dr., Suite 500
Northbrook, IL 60062
888.480.9138
Fax 847.480.9282
www.maplefloor.org

MIA Marble Institute of America
28901 Clemens Rd., Suite 100
Cleveland, OH 44145
440.250.9222
Fax 440.250.9223
www.marble-institute.com

ML/SFA Metal Lath/Steel Framing Assoc.
(A Division of the National Association of Architectural Metal Manufacturers)
800 Roosevelt Rd., Bldg. C, Suite 312
Glen Ellyn, IL 60137
630.942.6591
Fax 630.7903095
www.naamm.org

NAAMM National Association of Architectural Metal Manufacturers
800 Roosevelt Rd., Bldg. C, Suite 312
Glen Ellyn, IL 60137
630.942.6591
Fax 630.7903095
www.naamm.org

NAIMA North American Insulation Manufacturers Assoc,
44 Canal Center Plaza, Suite 310
Alexandria, VA 22314
703.684.0084
Fax 703.684.0427
www.naima.org

NAPA National Asphalt Pavement Association
NAPA Building
5100 Forbes Blvd.
Lanham, MD 20706
888.468.6499
www.hotmix.org

NCMA National Concrete Masonry Assoc.
13750 Sunrise Valley Dr.
Herndon, VA 20171-4662
703.713.1900
Fax 703.713.1910
www.ncma.org

NEC National Electrical Code (NFPA)

NECA National Electrical Contractors Assoc.
3 Bethesda Metro Center, Suite 1100
Bethesda, MD 20814
301.657.3110
Fax 301.215.4500
www.necanet.org

NEII National Elevator Industry, Inc.
1677 County Route 64
P.O. Box 838
Salem, NY 127865-0838
518.854.3100
Fax 518.854.3257
www.neii.org

NEMA National Electrical Manufacturers Assoc.
1300 North 17th St., Suite 1752
Rosslyn, VA 22209
703.841.3200
Fax 703.841.5900
www.nema.org

NFPA National Fire Protection Assoc.
1 Batterymarch Park
Quincy, MA 02169-7471
617.770.3000
Fax 617.770.0700
www.nfpa.org

NHLA National Hardwood Lumber Assoc.
6830 Raleigh-LaGrange Rd.
Memphis, TN 38184-0518
901.377.1818
www.natlhardwood.org

NLGA National Lumber Grades Authority
#302 960 Quayside Dr.
New Westminister, BC V3M 6G2 Canada
604.524.2393
Fax 604.524.2893
www.nlga.org

NPA National Particleboard Assoc.

18928 Premiere Court
Gaithersburg, MD 20879-1569
301.670.0604
Fax 301.840.1252
www.pbmdf.org

NPCA National Paint and Coatings Assoc.

1500 Rhode Island Ave., NW
Washington, DC 20005
202.462.6272
Fax 202.462.8549
www.paint.org

NRCA National Roofing Contractors Assoc.

10255 W. Higgins Rd., Suite 600
Rosemont, IL 60018-5607
708.299.9070
Fax 847.299.1183

NTMA National Terrazzo and Mosaic Assoc.

201 North Maple, Suite 208
Purcellville, VA 20132
540.751.0930
Fax 540.751.0935
www.ntma.com

NWWDA National Wood Window and Door Assoc.

1400 E. Touhy Ave.
Des Plains, IL 60018
800.223.2301
Fax 708.299.1286

PCA Portland Cement Assoc.

5420 Old Orchard Rd.
Skokie, IL 60077
847.966.6200
Fax 847.966.8389
www.cement.org

PCI Precast/Prestressed Concrete Institute

209 W. Jackson Blvd. #500
Chicago, IL 60606
312.786.0300
Fax 312.786.0353
www.pci.org

RFCI Resilient Floor Covering Institute

401 E. Jefferson St., Suite 102
Rockville, MC 20850
301.340.8580
Fax 301.340.7283
www.rfci.com

RMA Rubber Manufacturers Assoc.
1400 K St., NW, Suite 900
Washington DC 20005
202.682.4800
www.rma.org

SDI Steel Deck Institute
P.O. Box 25
Fox River Grove, IL 60021
847.458.4647
Fax 847.458.4648

SECO State Energy Conservation Office
LBJ State Office Bldg.
111 E. 17th St., Rm 1114
Austin, TX 78701
512.463.1931
Fax 512.475.2569
www.seco.cpa.stat.tx.us

SGCC Safety Glazing Certification Council
P.O. Box 730
Sackets Harbor, NY 13685
315.646.2234
Fax 315.646.2297
www.sgcc.org

SIGMA Sealed Insulating Glass Manufacturers Assoc.
401 N. Michigan
Chicago, IL 60611
312.644.8610
www.sigmaonline.org

SJI Steel Joist Institute
3127 Mr. Joe White Ave.
Myrtle Beach, SC 29577-6760
843.626.1995
Fax 843.626.5565
www.steeljoist.org

SMACNA Sheet Metal and Air Conditioning Contractors National Assoc.
4201 Lafayette Center Dr.
Chantilly, VA 20151-1209
703.803.2980
703.803.3732
www.smacna.org

SPIB Southern Pine Inspection Bureau
P.O. Box 10915
Pensacola, FL 32524-0915
850.434.2611
Fax 850.433.5594
www.spib.org

SPRI Single Ply Roofing Institute
77 Rumford Ave., Suite 3B
Waltham, MA 02453
781.647.7026
Fax 781.647.7222
www.spri.org

TCA Tile Council of America
100 Clemson Research Blvd.
Anderson, SC 29625
864.646.8453
Fax 864.646.2821
www.tileusa.com

TIMA Thermal Insulation Manufacturers Assoc.
29 Bank St.
Stanford, CT 06901
203.324.7533

(Standards now issued by NAIMA, www.naima.org)

UFAC Upholstered Furniture Action Council
Box 2436
High Point, NC 27261
919.885.5065
www.ufac.org

UL Underwriters Laboratories, Inc.
333 Pfingsten Rd.
Northbrook, IL 60062-2096
847.272.8800
Fax 847.272.8129
www.ul.com

WSFI Wood and Synthetic Flooring Institute
4415 W. Harrison St., Suite 242-C
Hillside, IL 60162
708.449.2933

WWPA Western Wood Products Assoc.
522 SW Fifth Ave., Suite 500
Portland, OR 97204-2122
503.224.3930
Fax 503.224.3934
www.wwpa.org

W.W.P.A. Woven Wire Products Assoc.
2515 N. Nordica Ave.
Chicago, IL 60635
312.637.1359
www.wovenwire.org

Government Agencies**CPSC** Consumer Products Safety Commission

4330 E. West Highway

Bethesda, MD 20814

301.504.7923

Fax 301.504.0124

www.cpsc.gov**CS** Commercial Standard

(U.S. Department of Commerce)

1401 Constitution Ave., NW

Washington, DC 20230

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202.482.2000

www.commerce.gov**DOC** U.S. Department of Commerce

1401 Constitution Ave., NW

Washington, DC 20230

202.482.2000

www.commerce.gov**EPA** Environmental Protection Agency

1445 Ross Ave., Suite 1200

Dallas, TX 75202

214.665.6444

www.epa.gov**FS** Federal Specifications (from GSA Specifications Unit WFSIS)

7th and D St., SW

Washington DC 20407

202.708.9205

www.apps.fss.gsa.gov/pub/fedspecs**GSA** General Services Administration

1800 F. St., SW

Washington DC, 20405

202.708.9205

www.gsa.gov**GSC** Texas Building and Procurement Commission

1711 San Jacinto

Austin, TX 78701

512.463.6363

www.tbpc.state.tx.us**NIST** National Institute of Standards and Technology

100 Bureau Dr., Stop 1070

Gaithersbury, MD 20899-1077

301.975.6478

Fax 301.975.8295

www.nist.gov

OSHA Occupational Safety and Health Administration
Federal Office Building
1205 Texas Ave., Rm 806
Lubbock, TX 79401
806.472.7681
Fax 806.472.7686
www.osha.gov

PS Product Standard of NBS
(U.S. Department of Commerce)
Washington, DC 20230
202.482.2000
www.thenbs.com

USDA U.S. Department of Agriculture
1400 Independence Ave., SW
Washington, DC 20250
202.447.2791
www.usda.gov

Section 014300 Quality Assurance

1. General Requirements

- 1.1 The Contractor is responsible for controlling the quality of the Work of its forces and its subcontractors and all of the Work of the Project in general and as set forth in the Construction Documents. The Contractor shall provide qualified personnel, approved by the Owner, to perform daily supervision, reviews and inspections of subcontractor work to insure quality, accuracy, completeness and compliance.
- 1.2 The Owner will employ a testing laboratory and/or geotechnical engineering service to perform quality assurance test and to transmit copies of test reports to the Contractor. Sampling and testing that the Owner may require is specified in this section and in the various technical sections requiring quality assurance testing. The Contractor shall cooperate with the Owner's testing personnel, provide access to the work, to manufacturer's and fabricator's operations, furnish incidental labor and facilities and samples for test and inspection as specified.
 - 1.2.1 Employment of the testing laboratory to perform quality assurance tests is for the benefit of Owner in confirming that performance and quality of the work is in conformance with the Construction Documents.
 - 1.2.2 Employment of the testing laboratory by Owner in no way relieves Contractor's obligation to perform the work in accordance with the Construction Documents and Owner's testing laboratory shall not be the same as Contractor's testing laboratory.
 - 1.2.3 The testing firm shall make all inspections and perform all tests in accordance with the rules and regulations of the building code, local authorities, the specifications of the ASTM and these Construction Documents.
 - 1.2.4 Any costs incurred by the Owner due to re-testing of materials or re-inspection of work due to non-compliance with the Construction Documents by the contractor shall be at the expense of the Contractor and shall be deducted from the next pay request accordingly.
- 1.3 Limits of testing laboratory authority: Laboratory is not authorized to:
 - 1.3.1 Approve or reject any portion of the work.
 - 1.3.2 Perform any duties of the Contractor and subcontractors.
 - 1.3.3 Revoke, alter, relax, expand, or release any requirement of the Construction Documents or to approve or accept any portion of the Work, except where such approval is specifically called for in the specifications.
 - 1.3.4 Work will be checked as it progresses, but failure to detect any defective work or materials shall not, in any way, prevent later rejection when such defect(s) are discovered.

- 1.4 When requested by the Owner, the Contractor will demonstrate a material's compliance with the specifications in one of the following ways:
- Manufacturer's Certificate of Compliance
 - Mill Certificate
 - Testing Laboratory Certifications
 - Report of actual test results from Owner's designated laboratory, or a laboratory satisfactory to the Owner. Materials so tested shall be provided by the Contractor and selected by the Owner, or in the presence of the Owner, and the method of testing shall comply with the professional societies' standard specifications.
- 1.5 The Owner may require Special Inspections, Testing or Approval of certain materials or Work in addition to those clearly specified in the Construction Documents. Upon notification by the Owner of such requirements, the Contractor shall promptly arrange for such Special Inspections, Testing and Approval procedures. The costs associated with these efforts shall be borne by the Owner, except that if such materials or Work fail the initial Owner-paid inspections, tests and approvals, then subsequent tests required to prove the materials or Work suitable for inclusion in the Project Work shall be borne by the Contractor.
- 1.6 If the Contractor covers any of the Work that is required to be inspected, tested or approved by the Construction Documents, then that Work shall be uncovered, inspected, tested or approved and then recovered at the Contractor's sole expense.
- 1.7 The Contractor shall have the right to have tests performed on any material at any time for its own information and job control so long as the Owner is not charged for these tests or forced to rely on these tests when appraising quality of the materials. The tests specified in the Construction Documents for a specific material shall take precedence over any testing initiated by and paid for by the Contractor.
2. **Below Grade Inspections** - Before covering or backfilling of any improvement below grade, cover up inspections will be conducted to see that all items meet the plans and specifications. Only after all the deficiencies have been corrected will the Contractor be allowed to install any backfill.
3. **Concrete Inspections** - Before the placing of any cast-in-place concrete structure, an inspection will be conducted to see that all items meet the intent of the Construction Documents. Only after all deficiencies have been corrected will the Contractor be allowed to proceed.
4. **Wall Closure/Above-Ceiling Inspections** - Before the installation of any ceiling or the closing of walls chases, an inspection will be conducted to see that all items fully meet the contract document requirements before being covered. Only after all the deficiencies have been corrected will the Contractor be allowed to install the ceiling or close-up the wall. As a minimum, the following should be in place before an above-ceiling inspection is scheduled:
- All light fixtures installed and working;
 - All plumbing installed and insulation complete;
 - All rigid and flexible ducts installed;
 - All required valve identification tags installed;
 - All air devices installed and connected;
 - All control wiring and devices installed and connected;
 - The ceiling support structure installed.
5. **Substantial Completion Inspection (see UGC 12.1.1)**
When the Contractor feels that the work is complete and ready for the Owner's intended use, it will notify the A/E and Owner at least seven days prior to the date the Contractor is ready for a Substantial Completion Inspection. The A/E and appropriate members of the design team along with the Owner will perform a detailed inspection of the all work and furnish the Contractor with a list of incomplete or unsatisfactory items. When the Contractor has completed all the work related to these items the Pre-Final Inspection will be complete.
6. **Final Inspection & Acceptance (see UGC 12.1.2 & 12.3)**
Upon verification by the A/E and Owner that the deficiencies found during the Pre-Final Inspection have been corrected, and the work is ready for Final Inspection and Acceptance, the A/E and Owner will schedule a Final Inspection. When the work is found to be acceptable under the Construction Documents without exception and the contract is fully performed, then

a Final Acceptance Notice will be issued by the A/E.

7. One-year Warranty Inspection

Within thirty-days prior to the expiration of the one year anniversary of the Substantial Completion date the Owner shall prepare a list of deficiencies related solely to the workmanship and material warranties provided by the Contractor through the Construction Documents. The Contractor shall make the necessary repairs and replacements and notify the Owner that all work is complete and Owner shall review and approve the work and provide written acceptance.

8. Execution

8.1 Pier Drilling Operations

8.1.1 A representative of the soils testing laboratory shall make continuous inspections to determine that proper bearing stratum is obtained and utilized for bearing and that shafts are properly clean and dry before pouring concrete.

8.1.2 Soils testing laboratory shall furnish complete pier log showing the diameter, top and bottom elevations of each pier, casing required or not required, bell size, actual penetration into bearing stratum, elevation of top of bearing stratum, and volume of concrete used.

8.2 Reinforcing Steel Mechanical Splices

8.2.1 Visually inspect and report on the completed condition of each mechanical splice of reinforcing steel.

8.2.2 Each mechanical splice shall be visually inspected to ensure compliance with building code and the manufacturer's published criteria for acceptable completed splices.

8.2.3 Special emphasis shall be placed on inspection of the end preparation of each bar to be spliced.

8.2.4 Submit copies of manufacturer's published criteria for acceptable completed splices prior to observing mechanical splices.

8.2.5 Reports on each splice shall indicate location, size of bars and acceptability or rejection of splice. Reasoning for rejection shall be provided in the report.

8.3 Reinforcing Steel and Embedded Metal Assemblies - Inspect all concrete reinforcing steel for compliance with Construction Documents and approved shop drawings prior to placing concrete. All instances of noncompliance shall be immediately brought to the attention of the Contractor for correction and then, if not corrected, reported to the A/E.

Observe and report on the following:

- Number and size of bars;
- Bending and lengths of bars;
- Splicing;
- Clearance to forms including chair heights;
- Clearance between bars or spacing;
- Rust, form oil and other contaminants;
- Grade of steel;
- Securing, tying and chairing of bars;
- Excessive congestion of reinforcing steel;
- Installation of anchor bolts and placement of concrete around such bolts;
- Fabrication of embedded metal assemblies, including visual inspection of all welds;
- Visually inspect studs and deformed bar anchors on embedded assemblies for compliance with the Construction Documents.

8.4 Concrete Inspection & Testing

8.4.1 Receive, evaluate and certify all proposed concrete mix designs submitted by the Contractor which comply with the Construction Documents. Mix designs not complying shall be returned by the laboratory as unacceptable.

8.4.2 Secure composite samples of concrete at the jobsite and perform the appropriate tests as specified in the Construction Documents. Test results will be provided to the appropriate design team members, the Contractor and the Owner.

8.4.3 Inspect the application of curing compounds and monitor all curing conditions to assure compliance with the Construction Documents.

- 8.5 Post-tensioning of Concrete
- 8.5.1 Verify certification of calibration of jacking equipment used in the post-tensioning operations.
- 8.5.2 Observe and report on placement and anchorage of tendons immediately prior to placement of concrete.
- 8.5.3 Provide a registered professional engineer experienced in posttension operations to observe and report on the placement, posttensioning and elongation measurement of each tendon.
- 8.5.4 Observe and report on grouting of tendons noted to be bonded.
- 8.6 Masonry
- 8.6.1 Provide a qualified inspector to inspect all structural masonry work on a periodic basis.
- 8.6.2 Inspect the following:
- Preparation of masonry prisms for testing;
 - Placement of reinforcing;
 - Grout spaces;
 - Mortar mix operations;
 - Bedding of mortar for each type of unit and placing of units;
 - Grouting operations;
 - Condition of units before laying for excessive absorption.
- 8.6.3 Provide a report of each inspection.
- 8.7 Structural Steel
- 8.7.1 Inspect all structural steel during and after erection for conformance with the Construction Documents and shop drawings. Any cases of insufficient bracing or guying, or other unsafe conditions shall be immediately called to the attention of the Contractor and reported to the A/E and Owner.
- 8.7.2 Inspect the following:
- Proper erection of all pieces;
 - Proper installation of all bolts;
 - Plumbness of structure and proper bracing;
 - Proper field painting;
 - Visual examination of all field welding;
 - Inspect all shop fabricated members, upon arrival at the jobsite, for
 - Inspection of shop and field welding shall be in accordance with the AWS Structural Welding Code – Steel, latest edition;
 - Inspection of bolted construction shall be in accordance with AISC specifications for structural steel buildings;
 - Inspection of stud field welding shall be in accordance with AWS structural welding code latest edition.
- 8.8 Expansion Bolt Installations
- 8.8.1 Inspect the drilling of holes and installation of expansion bolts for compliance with the Construction Documents and shop drawings.
- 8.8.2 Verify the installation torque of the expansion bolts for compliance with the manufacturer's installation instructions.
- 8.9 Metal Floor Deck - Field inspection shall consist of the following:
- Check types, gauges and finishes for conformance with Construction Documents and shop drawings;
 - Exam for proper erection of all metal deck, fastenings, reinforcing of holes, deck reinforcing, miscellaneous deck supports, hanger tabs, shear studs, deck closures, painting and other coatings.
- 8.10 Metal Roof Deck - Field inspection shall consist of the following:
- Check types, gauges and finishes for conformance with Construction Documents and shop drawings;
 - Exam for proper erection of all metal deck, fastenings, reinforcing of holes, deck reinforcing, miscellaneous deck supports, hanger tabs, shear studs, deck closures, painting and other coatings.

Section 014339 Site Mock-ups (see UGC 8.4)

1. General

- 1.1 The Contractor shall direct all the appropriate subcontractors in the construction of all site mock-ups for review by the Owner and Architect/Engineer (A/E) as required by the Construction Documents.
- 1.2 The mock-up(s) when approved by the A/E and Owner shall become the site reference for quality of the incorporated features of materials and workmanship.
- 1.3 The mock-up shall not be part of the work and shall remain in place until Substantial Completion, or otherwise directed by the Owner.

Section 014500 Quality Control (see 014000)

1. General Requirements

- 1.1 Quality control shall be the sole responsibility of the Contractor, unless specifically noted otherwise. The Contractor shall be responsible for all testing, coordination, start-up, operational checkout and commissioning of all items of work included in the project. All costs for these services shall be included in the Contractor's cost of work and general conditions.
- 1.2 Specific quality control requirements for individual construction activities are specified in sections that govern those activities.
- 1.3 The Contractor employed testing agency shall comply with the requirements of ASTM C - 1021, 1077, 1093, E - 329, 543 and 548.
- 1.4 The Contractor shall develop design mixes for products to be used and have the appropriate test performed by the Contractor's employed testing agency at its own expense.

Section 014518 Field Engineering

1. **Quality Assurance** - Surveyor Qualifications: Engage a land surveyor, registered in the State of Texas, to perform required land surveying services.
2. **Examination** - Verify layout information shown on the construction documents, in relation to the property survey and existing benchmarks and building locations and finish floor elevations before proceeding to lay out the work. Protect existing benchmarks and control points. Preserve permanent reference points during construction.
 - 2.1 Do not change or relocate benchmarks or control points without prior written approval from the Owner.
 - 2.2 Establish and maintain a minimum of two permanent benchmarks on the site.
3. **Performance**
 - 3.1 Work from lines and levels established by the Construction Documents. Calculate and measure required dimensions with indicated and recognized tolerances. Do not scale drawings to determine dimensions.
 - 3.2 Record deviations from required lines and levels and advise A/E immediately when deviations exceed indicated or recognized tolerances.
 - 3.3 Furnish information necessary to adjust, move, or relocate existing structures, utility poles, lines services, or other appurtenances located in or affect by construction.
 - 3.4 The as-built documents shall include a final Title I property survey.

Section 015000 Construction Facilities and Temporary Controls (see UGC 3.3.4, 8.1 & 13.1; also see 5.6.8, 5.8.2 13.13 & 13.1.4 of the CSP contract)

1. General Requirements

- 1.1 Contractor shall provide all construction facilities and temporary controls specified in this section and as necessary for the proper and expeditious prosecution of the work. The Contractor will be provided with a description of the Project Site and the Limits of Construction either by the Construction Documents, or by the Owner. At any time such a description has not been provided, the Contractor should request it of the Owner in writing.

- 1.2 The Contractor shall erect a wire mesh fence around the Project Site. The Contractor and all its personnel, assigns, material suppliers and subcontractors shall confine and limit their work to the Project Site and shall confine their construction activities to within the Limits of Construction. All areas beyond these defined areas are patrolled either by the Campus Police or by the Police Department of the City. All public and University laws, ordinances, rules and regulations shall be obeyed. No tools, construction vehicles or construction materials shall be permitted to be outside the Project Site. Loitering of construction-related personnel in areas outside the Project Site is strongly discouraged and it will be discontinued if it becomes persistent, or otherwise a nuisance to the ordinary and normal functioning of the campus. **(UGC 3.3.11)**
- 1.3 All campus roads, drives, fire lanes and sidewalks/pedestrian routes (other than those specifically given over to the Contractor for its use) must be kept open and clean at all times. The Contractor shall make advanced preparations for, and obtain security clearance for, all significant materials and equipment movements that will disrupt traffic and pedestrian flows. The Contractor shall provide all traffic controls, warning signs, barricades and flag persons needed to minimize disruptions during such approved movements. When such movements cause damage or leave debris, the Contractor shall immediately repair and clean up afterwards. **(UGC 3.3.11.3)**
- 1.4 Contractor shall pay all charges for all connections to and distribution from existing services and sources of supply.
- 1.5 Requirements of service and utility companies relating to the work shall be ascertained by Contractor, and the Contractor shall comply with all requirements, including those relating to continued protection and maintenance until completion of the work.
- 1.6 Materials and construction for construction facilities and temporary controls may be new or used, must be in adequate capacity, must not create unsafe conditions and shall not be unsightly.
- 1.7 Contractor shall relocate temporary services and facilities at its own expense, as required by progress of construction. **(See UGC 7.2.1)**
- 1.8 Contractor shall remove all temporary services and facilities when their use is no longer required or at completion of the project. **(See UGC 3.3.11)**
- 1.9 Contractor shall clean and repair damage caused by temporary services and facilities to new condition for new work and to a condition as good as or better than existing prior to start of work for existing construction projects. **(See UGC 3.3.11.3)**

2. Yard Repairs

Where compaction of the soil has occurred in turf or other plant material areas within the limits of construction, the areas shall be rejuvenated by deep cultivation of the compacted soil. After completion of construction, the Contractor shall scarify the construction site within the limits of construction to a minimum depth of eight inches, except within thirty feet of trees where it shall be a six inch depth. The Contractor will either place sod or hydro mulch on the rejuvenated areas, as may be mutually agreed to between the Owner and the Contractor, depending on the season and availability of irrigation.

3. Temporary Utilities and Services

- 3.1 The Contractor shall provide for all necessary and appropriate temporary utilities and services for execution and protection of the work.
- 3.2 Schedule of Costs and Fees for Utility Services are different on different campuses. The Contractor must review the Construction Documents carefully and communicate with the Owner to determine the status on each Project.
 - 3.2.1 **Temporary Water** – The Contractor shall provide and install temporary lines for all water required for the Work and will arrange with the Owner's Utility Department for connection to the campus system and for services.
 - 3.2.2 **Temporary Electrical** – The Contractor shall arrange with the local Utility Company for temporary power and for metering. When using this temporary power, the Contractor shall be responsible for all related costs, including energy costs and fuel costs. If such power is available from the campus power systems, then the Contractor will make the same arrangements, but the Owner will pay for the power used unless the Contractor wastes energy and is not consuming it in a reasonable and prudent

manner. The Contractor shall not energize the permanent power on the Project it is constructing until the Owner specifically approves.

- 3.2.3 **Temporary Heating, Cooling and Ventilation** – If temporary heating/cooling/ventilation is required for the protection of the Work or the work forces, the Contractor shall provide, at its cost, Owner-approved apparatus.
- 3.2.4 **Temporary Lighting** – The Contractor shall provide adequate temporary lighting to facilitate quality workmanship and appropriate inspection of the Work. Temporary lighting provided by the Contractor also must be adequate for site security, inspections of excavations, night work if pursued and for personal and general safety of operations. Provide the following minimum standards:
 - 3.2.4.1 Provide and maintain lighting for construction operations to achieve a minimum lighting level of two watts per square foot.
 - 3.2.4.2 Provide and maintain one watt per square foot lighting for exterior staging and storage areas after dark for security purposes.
 - 3.2.4.3 Provide and maintain one-quarter watt per square foot lighting to interior work areas after dark for security purposes.
 - 3.2.4.4 Permanent building lighting may be utilized during construction.
- 3.2.5 **Temporary Services Provided by Owner** – When approved by the Owner, the Contractor may request that Project mechanical and electrical systems be put into service prior to Substantial Completion, even if only to facilitate Contractor operations. However, the Contractor shall NOT open or close any valve connecting to the campus systems without specific Owner approval. During operation of the equipment prior to Substantial Completion the Contractor shall keep the equipment in good operating condition, properly and legally flushed with chemical treatment systems, properly started and stopped, properly maintained, including regular replacement and/or cleaning of filters. Without exception the filters will be newly replaced just prior to turning the equipment over to the Owner for operation. The actual warranty periods will not start until the equipment is officially turned over to the Owner at Substantial Completion.
- 3.2.6 **Temporary Facilities/Equipment Removal** – Prior to turning the Project over to the Owner for operation and maintenance, the Contractor shall completely remove all temporary facilities and equipment from the Project Site and shall repair or replace any material, equipment, finished surfaces or landscaping that has been damaged by its activities on the site.

4. Construction Aids

- 4.1 **Material and Personnel Hoists:** The Contractor shall provide material and personnel hoist as required for normal use by all trades without charge. All necessary guards, signals and safety devices required for safe operation of these hoists shall be provided and properly maintained at all times.
- 4.2 **Stairs:** Provide temporary protective treads, handrails and wall coverings at stairways.

5. Barriers and Enclosures

- 5.1 Contractor shall construct temporary barricades, warning signs, hazard and warning lights, walks, passage-ways and similar temporary barriers and enclosures that are necessary to protect persons and property from hazards or damage due to construction operations, and required by the Owner, city, state or federal laws, ordinances or codes.
- 5.2 Contractor shall furnish and install construction fences and gates within the limits of construction, prior to beginning any other work on the project.
- 5.3 Contractor shall furnish and install movable fences as may be necessary and appropriate to facilitate execution of the work.
- 5.4 The Contractor shall be responsible for the protection of existing building surfaces (both interior and exterior), utilities, exterior structures, pavements, sidewalks, landscape, vegetation and irrigation systems. Any damage to existing areas will be repaired by the Contractor at its expense and to the satisfaction of the Owner. Such needed repairs that are not timely undertaken or completed by the Contractor may, at the Owner's sole discretion, be repaired by the Owner and the related expenses deducted from the Contract Amount by change order.
- 5.5 All existing trees, shrubs or endangered plants within the Project Site or near access ways to

the Project Site, shall be protected by the Contractor as indicated on the Drawings and maintained in sound condition unless ordered by the Owner to remove them. Contractor shall furnish and install barricades, fences and guards as necessary to prevent damage to existing trees, shrubs or endangered plants indicated to remain after construction is completed. Contractor shall not remove, cut or trim any tree, shrub or endangered plant before first notifying the Owner and receiving prior approval for the action. The Contractor will be responsible for repair or replacement in kind of damaged vegetation including watering and maintenance until fully restored.

- 5.6 All fencing, gates, barricades and guards shall be maintained to be straight, level and having a neat and uniform appearance while in place. Upon removal all holes and damage caused by the placement and use of the fences shall be repaired to its original condition.
- 5.7 Contractor shall provide temporary roofing and weather tight insulated closures for openings in exterior surfaces as required to maintain specified working conditions and moisture content of all project materials.

6. Security

- 6.1 The Contractor shall provide security and facilities to protect the Work, materials and equipment from unauthorized entry, vandalism, or theft until Substantial Completion has been achieved. If deemed necessary the Contractor may, at its own expense, employ unarmed security personnel. The Contractor must first must notify the Owner and provide particulars about the security firm and its personnel prior to its employment.
- 6.2 The Campus Police will not provide security for the Project Site or the areas that are given over to the Contractor's control.

7. Temporary Controls

- 7.1 Cleaning during construction: Contractor at all time shall keep the premises free from accumulation of waste materials and rubbish caused by operations for the work. Provide a collection can at each area used for eating. Pick up garbage daily. Keep project site free of garbage, trash, vermin and rodent infestation. Require each subcontractor to collect and deposit waste and rubbish caused by subcontractor operations at designated locations. Clean interior areas prior to start of finish work and maintain areas free of dust and other contaminates during finishing operations. Protect installed equipment and seal installed ductwork and piping to prevent intrusion of dust. When the Work is within or adjacent to existing spaces that continue to be occupied, protect finishes, seal off occupied spaces and open ductwork and piping. The Contractor shall provide personnel for janitorial work to clean up (both on the Project Site and in adjacent spaces) any dust or debris that results from its operations. **(see UGC 3.3.8)**
- 7.2 Noise control: In and around occupied areas, minimize use of noise producing equipment and sequence the Work to minimize its affect of occupants. Work with noise producing equipment adjacent to occupied spaces will be coordinated with the Owner. Curtail such use to accommodate specific meetings or activities when requested by the Owner.
- 7.3 Water control: Provide methods to control surface water to prevent damage to the project and adjoining properties. Control fill, grade and ditch to direct surface drainage away from excavations, pits, tunnels and other construction areas. Direct runoff to proper runoff paths.
- 7.4 Storm Water Pollution Prevention Plan (SWPPP): Contractor shall be responsible for securing the appropriate SWPPP permit and paying all related fees, penalties, fines, etc., related thereto, from Texas Commission on Environmental Quality (TCEQ). The Contractor shall implement the SWPPP plan and insure that all devices and structures are properly maintained through the course of the project. Upon completion of the project the Contractor shall provide TCEQ with a Notice of Termination within thirty days of final stabilization achievement. Refer to SWPPP for additional requirements and to ensure compliance with its requirements.
- 7.5 Pollution controls: Provide methods, means and facilities required to prevent contamination of soil, water, or atmosphere by discharge of noxious or hazardous substances from construction operations. The Contractor shall notify the Owner immediately of all pollutant spills. The Contractor shall be solely responsible for cleaning up and properly disposing of, in accordance with applicable laws and regulations, all spilled pollutants brought to the Site as a part of the Work including oil, paint, fuels, antifreeze, solvents, etc. The Contractor must keep accurate records of these clean up and disposal actions.

- 7.6 Protection of installed work: **(see UGC 10.3.4.1)**
 - 7.6.1 Protect installed work and provide special protection where specified in individual specification sections.
 - 7.6.2 Provide temporary and removable protection of installed products and control activity in the immediate area to prevent damage.
 - 7.6.3 Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
 - 7.6.4 Protect finished floors, stairs and other surfaces from dirt traffic, wear, damage, or movement of heavy objects.
 - 7.6.5 Prohibit traffic or storage upon waterproofed or roofed surfaces, or in the alternative obtain the manufacturer's recommendations for protection.
 - 7.6.6 Prohibit traffic from landscaped areas.

8. Parking: (see UGC 3.3.11.1)

- 8.1. Parking for workmen employed on the site shall be provided within the Limits of Construction or on such remote site as may be designated by the Owner from time to time. Any costs involved in Contractor parking shall be borne by the Contractor. The Contractor's forces shall not park on campus in areas outside the Project Site.
- 8.2. In some, but not all circumstances, Owner may provide remote parking spaces near the campus. In these cases the parking may be available for Contractor use at no cost, but permits issued by the campus police will be necessary to use this parking. In providing remote parking the Owner will not take on any responsibility for the vehicles, or contents of the vehicles, when they are parked in the remote locations provided.
- 8.3. The contractor shall provide adequate reserved parking for the Owner's and the A/E's Project Team members who regularly visit the Project Site.
- 8.4. The Contractor shall be responsible for restoration of all pavement, curbs, signage, sidewalks, etc., damaged by the construction operations and/or the workmen.

9. Field Offices and Sheds

- 9.1. The office shall be weather tight, with lighting, electrical outlets, highspeed internet connection, telephone, heating, cooling and ventilation and equipped with sturdy furniture, a drawing table and plan racks.
- 9.2. Provide adequate space for projects meetings.

10. Temporary Toilets (see UGC 3.3.4)

- 10.1 Provide, maintain and pay for required temporary sanitary facilities and enclosures. Provide at time of project mobilization and do not remove until Substantial Completion. Locate these facilities away from public view as much as practical.
- 10.2 Clean and empty these facilities at least weekly unless it is needed more often to keep them sanitary. Post notices, remove deposited debris and take all steps necessary to keep the facilities clean and sanitary.
- 10.3 Do not use the Owner's toilet facilities, unless specifically approved by the Owner.

Section 015010 Project Signage

1. Installation of Temporary Project Signage

- 1.1 When permitted by the Owner, an exterior construction project sign shall be installed immediately after contract award. The sign will make specific reference to the Houston Community College Campus Location.
- 1.2 Prior to any construction or installation of the sign, submit to the Owner for approval a quarter scale drawing, complete with all graphics and lettering.
- 1.3 The Contractor shall ensure the exterior construction project signage is properly set-back from all street intersections and pedestrian walkways such that it does not conflict with or impede fields of view necessary to vehicular and pedestrian traffic circulation.
- 1.4 The Contractor may install one sign bearing the company name, logo, project address and point of contact.
- 1.5 The sign shall remain the property of the Contractor and shall be removed from the Project Site and legally disposed of at the completion of the Work.

2. Signage Dimensions and Materials -

The exterior construction project sign shall be constructed of a single four foot by eight foot sheet of three-quarter inch thick marine plywood

placed on two four inch by four inch treated posts. The Architect/Engineer (A/E) shall provide the Contractor with the lettering, font background and rendering of the project, which will be installed by a professional sign company. All related costs shall be included in the General Conditions costs of Construction Manager and Design-Build contracts.

Section 015240 Construction Waste Management

1. Definitions

- 1.1 Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- 1.2 Disposal: Removal off-site of demolition and construction waste and deposited in landfill or incinerator acceptable to authorities having jurisdiction.
- 1.3 Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- 1.4 Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- 1.5 Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the work.

2. Performance Goals - The Contractor shall develop a waste management plan that will result in end of project rates for salvage/recycling as directed by the Owner during the Pre-construction conference.

3. Quality Assurance - The Contractor shall continuously monitor the disposal, recycling, salvage and reuse of materials generated by the Project to confirm compliance with the waste management plan and provide a report to the project team at each progress meeting.

4. Waste Management Plan - The Contractor shall develop a plan consisting of waste identification, waste reduction work plan and cost/revenue analysis. The plan should include separate sections for demolition and construction waste.

5. Salvaging Demolition Waste

- 5.1 Salvage of items for sale or donation by the Contractor or subcontractors is not permitted.
- 5.2 Salvaged items for Owner's use:
 - 5.2.1 Clean salvaged items;
 - 5.2.2 Pack or crate items and properly identify contents on the container;
 - 5.2.3 Store items in a secure area until delivery to Owner;
 - 5.2.4 Transport items to Owner's designated storage area.

6. Recycling Demolition and Construction Waste, General - Separate recyclable waste by type at project site to maximum extent practical.

- 6.1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from the project site.
- 6.2. Remove recyclable waste off Owner's property and transport to recycling receiver or processor within a reasonable time after an appropriate amount has been accumulated.

Section 017000 Contract Close-out

1. General (see UGC Article 12)

- 1.1 Project closeout is hereby defined to include requirements near the end of the contract time, in preparation for Substantial Completion acceptance, occupancy by Owner, release of retainage, final acceptance, final payment and similar actions evidencing completion of the work.
- 1.2 Time of closeout is directly related to completion and acceptance and may either be a single time period for the entire project, or a series of times for individual portions or phases of the project that have been certified as substantially complete at different times.
- 1.3 If the project is to be accepted in phases, whether by originally specified project scope or by subsequent agreement between the parties, then the project closeout requirements shall pertain to each separately accepted portion or phase of the project. All required documentation for the portion of the project to be occupied early shall be furnished by the Contractor to the Owner on, or before, the date of early occupancy by the Owner. Such early

occupancy of any portion of the Work will not waive the Contractor's obligations to complete the remaining Work within the Contract Time specified in the contract.

2. Record Documents (see UGC 6.2)

- 2.1 Record documents for project closeout shall include, but not necessarily limited to the following, which are required for substantial completion:
- As-built record drawings;
 - As-built record specifications;
 - Operating & maintenance manuals;
 - Record approved submittals and samples;
 - Certificate of no asbestos products incorporated in project;
 - Completed punch lists.

3. Required Documents

- 3.1 Required documents for final payment to be released included final versions of all of the above and the following:
- Final release of claims and liens; **(see 12.3.5 through 12.3.8 of the CSP contract)**
 - Affidavit of payment of debts and claims;
 - Consent(s) of surety;
 - Completed SWPPP documents and Notice of Termination;
 - Completed commissioning and closeout manuals.

4. Requirements for Substantial Completion (see UGC 12.1.1)

- 4.1 Prior to requesting Architect/Engineer (A/E) and Owner to schedule a Substantial Completion, or Pre-Final inspection, the Contractor shall complete the following and list known exceptions in the request:
- 4.1.1 Contractor's payment request should reflect a minimum of 95% completion for all applicable work.
 - 4.1.2 Provide A/E and Owner with a complete copy of the Contractor's most current punch list.
 - 4.1.3 Submit to the A/E for review a full set of as-built record drawings and specifications.
 - 4.1.4 Submit to the A/E for review preliminary copies of the operating and maintenance manuals.
 - 4.1.5 Submit release enabling Owner's full and unrestricted use of the work and access to service and utilities, including operating certificates and similar releases.
 - 4.1.6 Contractor shall make provisions for final changeover of locks with the Owner's personnel.
 - 4.1.7 Complete initial clean up requirements as described in the specifications.
- 4.2 The Contractor shall ensure that the work is ready for inspection and/or re-inspection. If the work is found not to be as stated in the Contractor's punch list or the items have not been substantially corrected/completed; the inspection will be terminated.

5. Requirements for Final Acceptance (see UGC 12.1.2)

- Prior to requesting A/E and Owner to schedule final inspection for the project, the Contractor shall complete the following:
- 5.1 Prepare draft payment request showing 100% completion for each line item on the schedule of values, including all appropriate releases and supporting documentation.
 - 5.2 Submit a copy of the pre-final punch list which includes evidence that each item has been completed or otherwise resolved.
 - 5.3 Submit final meter readings for utilities as of the time when the Owner took possession.
 - 5.4 Transmit completed commissioning and close-out manuals to the Owner.
 - 5.5 Complete final cleaning and touch-up.
 - 5.6 Submit final payment request.
 - 5.7 Submit evidence of final and continuing insurance coverage complying with applicable insurance requirements.

6. Operating and Maintenance Manuals (see UGC 6.2.3 & 6.2.4)

- 6.1 Contractor shall organize operating and maintenance manual information into suitable sets of manageable size, and bind into individual binders properly tabbed and indexed. Two complete copies of each bound operating and maintenance manual shall be provided to the Owner and one complete copy for the A/E.
- 6.2 The requirements of this section are separate, distinct and in addition to product submittal requirements that may be established by this and other sections of the specifications.
- 6.3. Material and equipment data required by this section is intended to include all data necessary for the proper installation, removal, normal operation, emergency operation, startup, shutdown, maintenance, cleaning, adjustment, calibration, lubrication, assembly, disassembly, repair, inspection, trouble shooting and service of the equipment or materials.

7. Record Product Submittals

During progress of the work, maintain approved copies of each product data submittal and shop drawings, and mark-up significant variations in the actual work in comparison with submitted information. A separate binder with one copy of all MSDS sheets for any and all products incorporated into the project shall be maintained during the course of the project, this binder shall be included in the record submittal documents.

8. Record Sample Submittals

Immediately prior to the date(s) of Substantial Completion, arrange for A/E and Owner to meet with Contractor at the project site to determine which (if any) of the submitted samples or mock-ups maintained by Contractor during progress of the work are to be transmitted to Owner for record purposes.

9. Commissioning and Close-out Manual

The Contractor shall incorporate all commissioning and closeout documentation and/or verification not included in the operating and maintenance manuals, into a manual for transmittal to the Owner

Section 019100 General Commissioning Requirements

1. Scope of Work Included

- 1.1 It is of primary concern that all operable systems installed in the project perform in accordance with the Construction Documents and the specified Owner's operational needs. This is particularly critical for systems affecting life safety, building controls, plumbing, HVAC, lighting and power delivery systems. The process of assuring such performance is achieved is commonly referred to as "Commissioning".
- 1.2 This section establishes minimum general and administrative requirements pertaining to start-up and commissioning of equipment, devices, and building systems. Additional technical and operational requirements for particular systems and components are established in the various technical sections of the specifications. The Contractor is solely responsible for the Commissioning process.

2. Commissioning Plan

- 2.1 The Contractor shall prepare a detailed commissioning plan to identify the following:
 - 2.1.1 Project commissioning team members;
 - 2.1.2 Commissioning activities;
 - Pre-functional tests;
 - Start-up tests;
 - Functional tests;
 - System integration testing.
 - 2.1.3 The Contractor shall properly document the results of each phase of the commissioning plan and notify Architect/Engineer (A/E) and Owner of any failures to achieve the specified performance levels.
- 2.2 The Contractor shall incorporate the commissioning plan into the project baseline schedule to reflect dates and durations of all commissioning activities.

3. Equipment Documentation Requirements

The Contractor shall develop a complete equipment matrix/list of all equipment, devices and systems which will be presented to the project commissioning team at the Pre-commissioning

conference. The following information should be included on the matrix/list:

- Brief equipment identification text;
- Equipment or device i.d. number;
- Start-up inspection required;
- Associated building system;
- Governing specification section;
- Appropriate submittal reference number(s);
- Installation location (room number or column coordinates).

4. Test Equipment

- 4.1 The Contractor and subcontractors shall provide all specialized tools, test equipment and instruments required to execute start-up, checkout and functional performance testing of equipment under their contracts.
- 4.2 Test equipment shall be of sufficient quality and accuracy to test and/or measure system performance within tolerances specified. A testing laboratory shall have calibrated the test equipment within the previous twelve months. Calibration shall be NIST traceable and in accordance with the manufacturer's recommendations.

5. Pre-commissioning Meeting

- 5.1 The Contractor shall conduct the Pre-commissioning meeting and review all aspects of the commissioning plan. All documentation will be discussed and test procedures will be reviewed for approval by the Owner.
- 5.2 The Contractor shall establish target dates for each of the commissioning activities and these will be discussed at all future project progress meetings.

6. Pre-installation Meeting - The Contractor shall schedule a pre-installation meeting for the work of each major building system. This meeting shall be scheduled following approval of system submittals and prior to commencement of system installation work.

7. Contractor's Verification of Installation

The Contractor shall perform a review of all tests to confirm completion and compliance with the specified performance specifications. The Contractor shall verify:

- Each component device has been properly installed;
- All shop drawings and product data submittals have been approved;
- All valve charts, wiring diagrams, control schematics, electrical panel directories, etc. have been submitted, approved and properly installed;
- All tabulated data has been submitted for each system and/or device as required by the specifications;
- All test reports and/or certifications required have been submitted and accepted;
- Any and all deficiencies have been corrected and re-tested to conformance with the specifications.

8. Contractor's Operational Testing

- 8.1 The Contractor shall operate, or cause to be operated each system, device or equipment item, both intermittently and continuously, for the appropriate duration as set forth in the specifications and/or in accordance with the manufacturer's recommendations. These operations will be documented as a functional test.
- 8.2 Each component device and each building system shall be exercised to the full extent of its capability, from minimum to maximum, and under automatic control, where it is applicable, as well as checking manual operation.

9. Integrated System Demonstration

- 9.1 After successful completion and subsequent documentation of all system operations, the Contractor shall schedule a meeting with the project commissioning team to review the demonstration of all integrated systems within the facility.
- 9.2 The demonstration(s) shall included not only normal operating conditions over the entire

operating range, but also failure modes such as major component failure and loss of power.

10. Owner Training

- 10.1 Training shall consist of classroom type sessions followed by on-site demonstrations of system operations.
- 10.2 The Contractor shall provide a minimum of eight hours of video recording of the training, with audio. The Owner will designate which portions of the training will be recorded. The video shall be produced in a professional manner.



Procurement Operations

Sample Contract Documents

By and Between

Houston Community College

And

For

Stafford Campus Renovations - Bldg B

CONTRACT BETWEEN HOUSTON COMMUNITY COLLEGE

And

HCC Project No. 11-38

This Contract ("Contract") is made by and between Houston Community College ("HCC," "Owner"), a public community college district organized under Chapter 130 of the Texas Education Code, and _____, hereinafter known as (the "Consultant"), whose address is _____ (individually, "Party" and collectively, "Parties"), effective as of _____ ("Effective Date").

WITNESSETH, that the Contractor and the Owner for the consideration hereinafter named agree as follows:

ARTICLE 1. SCOPE OF WORK: The Contractor shall furnish all of the materials and perform all of the work shown on the drawings and described in the specifications for the project entitled Stafford Campus Renovations - Bldg B (Project No.11-38). These drawings and specifications prepared for Houston Community College by _____, acting as and in these Contract Documents entitled the Project Architect. The Contractor shall do everything required by this Agreement, the General and Supplemental Conditions of the Contract, the Special Conditions, the Addenda, the Specifications, the Drawings, the Historically Underutilized Business (HUB) Subcontracting Plan, and the Proposal attached as Exhibit 1 (including any unit prices stated therein).

The Specifications and Drawings are enumerated as follows:

UNIFORM GENERAL and SUPPLEMENTARY GENERAL CONDITIONS	Exhibit 1
SECTION 010000 MISCELLANEOUS REQUIREMENTS	Exhibit 2
CONTRACT FORMS AND GENERAL REQUIREMENTS	Exhibit 3
DRAWING LIST	Exhibit 4
ADDENDUM	Exhibit 5
ALLOWANCES	Exhibit 6
GENERAL CONDITIONS REQUIREMENTS, INSURANCES, TAXES & BOND LINE ITEMS	Exhibit 7
INSURANCE REQUIREMENTS	Exhibit 8
PAYMENT AND PERFORMANCE BONDS, DOCUMENTS BF & BG	Exhibit 9
OWNER'S SPECIFICATIONS	Exhibit 10
ASSURANCE OF SBDP GOAL	Exhibit 11
POLICY ON UTILIZATION OF SMALL BUSINESS (SB) PROGRAM	Exhibit 12
CONTRACTOR/SUBCONTRACTOR PARTICIPATION FORM	Exhibit 13
SUBCONTRACTOR PAYMENT CERTIFICATION FORM	Exhibit 14
SUBCONTRACTOR PROGRESS ASSESSMENT FORM	Exhibit 15
SMALL BUSINESS DEVELOPMENT PROGRAM	Exhibit 16
PAYROLL FOR CONTRACTOR'S OPTIONAL USE (U.S.) DEPT OF LABOR)	Exhibit 17

ARTICLE 2. TIME OF COMPLETION: The Owner shall provide a Notice to Proceed in which a date for commencement of the work shall be stated; such commencement date shall be 10 or more days after the date of the notice. The Contractor shall achieve substantial completion of the work within _____ (___) calendar days after such commencement date, as such completion date may be extended by approved Change Orders. The time set forth for completion of the work is an essential element of the Contract.

ARTICLE 3. THE CONTRACT SUM: The Owner shall pay the Contractor for performance of the Contract, subject to additions and deductions provided therein, the sum of _____ (\$ _____), and make payment on account as hereinafter provided.

ARTICLE 4. HUB SUBCONTRACTING PLAN: The Owner has adopted **Document DG, Assurance of SBDP Goal** ("Policy"), which is incorporated herein by reference. Contractor, as a provision of the Agreement must comply with the requirements of the Policy and adhere to the Small Business ("SB") Subcontracting Plan submitted with Contractor's Proposal and attached as **Exhibit 10, Exhibit 11, and Exhibit 12**. No changes to the SB Subcontracting Plan can be made by the Contractor without the prior written approval of the Owner in accordance with the Policy.

ARTICLE 5. LIQUIDATED DAMAGES: For each consecutive calendar day after the substantial completion period set forth in Article 2 above that any work, including the correction of deficiencies found during the final testing and inspection, is not completed, the amount of five hundred dollars (\$500.00) will be deducted from the money due or becomes due the Contractor, not as a penalty but as liquidated damages representing the parties' estimate at the time of contract execution of the damages which the Owner will sustain for late completion.

ARTICLE 6. CERTIFICATION OF NO ASBESTOS CONTAINING MATERIALS OR WORK: The Contractor shall provide a certification statement, included with each materials submittal, stating that no asbestos containing materials or work is included within the scope of the proposed submittal.

The Contractor shall insure that Texas Department of Health licensed individuals, consultants or companies are used for any required asbestos work including asbestos inspection, asbestos abatement plans/specifications, asbestos abatement, asbestos project management and third-party asbestos monitoring.

The Contractor shall provide at Substantial Completion, a notarized affidavit to the Owner and the Architect stating that no asbestos containing materials or work was provided, installed, furnished or added to the Project.

The Contractor shall take whatever measures he deems necessary to insure that all employees, suppliers, fabricators, material men, subcontractors, or their assigns, comply with this requirement.

All materials used on this Project shall be certified as non Asbestos Containing Building Materials (ACBM). The Contractor shall insure compliance with the following acts from all of his subcontractors and assigns:

Asbestos Hazard Emergency Response Act (AHERA—40 CFR 763-99 (7));

National Emission Standards for Hazardous Air Pollutants (NESHAP—EPA 40 CFR 61, National Emission Standard for Asbestos;

Texas Asbestos Health Protection Rules (TAHRP—Tex. Admin. Code Title 25, Part 1, Ch. 295C, Asbestos Health Protection

Every subcontractor shall provide a notarized statement that no ACBM has been used, provided, or left on this Project.

The Contractor shall provide, in hard copy and electronic form, all necessary material safety data sheets (MSDS) of all products used in the construction of the Project to the Texas Department of Health licensed inspector or Project Architect or Engineer who will compile the information from the MSDS and, finding no asbestos in any of the product, make a certification statement.

At Final Completion the Contractor shall provide a notarized certification statement per TAC Title 25 Part 1, Ch. 295.34, par. c.1 that no ACBM was used during construction of the Project.

ARTICLE 7. ACCEPTANCE OF BID OR AWARD OF CONTRACT: By signing this Agreement, the undersigned certifies as follows:

Assignment. This Agreement is a personal service contract for the services of Construction, and Contractor's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

Records of expenses pertaining to Additional Services and services performed on the basis of a Worker Wage Rate or Monthly Salary Rate shall be kept on the basis of generally accepted accounting principles and in accordance with cost accounting standards promulgated by the Federal Office of Management and Budget Cost Accounting Standards Board and shall be available for audit by the Owner or the Owner's authorized representative on reasonable notice.

Family Code Child Support Certification. Pursuant to Section 231.006, Texas Family Code, Service Provider certifies that it is not ineligible to receive the award of or payments under this Agreement and acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate.

Eligibility Certification. Pursuant to Section 2155.004, Texas Government Code, Service Provider certifies that the individual or business entity named in this Agreement is not ineligible to receive the award of or payments under this Agreement and acknowledges that this Agreement may be terminated and payment withheld if this certification is inaccurate.

Franchise Tax Certification. A corporate or limited liability company Contractor certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171 of the Texas Tax Code, or that the corporation or limited liability company is exempt from the payment of such taxes, or that the corporation or limited liability company is an out-of-state corporation or limited liability company that is not subject to the Texas Franchise Tax, whichever is applicable.

Payment of Debt or Delinquency to the State. Pursuant to Sections 2107.008 and 2252.903, Texas Government Code, Contractor agrees that any payments owing to Contractor under this Agreement may be applied directly toward any debt or delinquency that Contractor owes the State of Texas or any agency of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.

Entire Agreement; Modifications. This Agreement supersedes all prior agreements, written or oral, between Contractor and Owner and shall constitute the entire Agreement and understanding between the parties with respect to the Project. This Agreement and each of its provisions shall be binding upon the parties and may not be waived, modified, amended or altered except by a writing signed by Contractor and Owner.

Captions. The captions of paragraphs in this Agreement are for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction.

Governing Law and Venue. This Agreement and all of the rights and obligations of the parties and all of the terms and conditions shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas without reference to its conflicts of law provisions. The county where the Project is located, Houston, Texas, Harris County, shall be the sole place of venue for any legal action arising from or related to this Agreement or the Project in which the Owner is a party.

Waivers. No delay or omission by either party in exercising any right or power arising from non compliance or failure of performance by the other party with any of the provisions of this Agreement shall impair or constitute a waiver of any such right or power. A waiver by either party of any covenant or condition of this Agreement shall not be construed as a waiver of any subsequent breach of that or of any other covenant or condition of the Agreement.

Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted assigns and successors.

Appointment. Owner hereby expressly reserves the right from time to time to designate by notice to Contractor a representative(s) to act partially or wholly for Owner in connection with the performance of Owner's obligations. Contractor shall act only upon instructions from the designated representative(s) unless otherwise specifically notified to the contrary.

Records. Records of Contractor's costs, reimbursable expenses pertaining to the Project and payments shall be available to Owner or its authorized representative during business hours and shall be retained for four (4) years after final Payment or abandonment of the Project, unless Owner otherwise instructs Contractor in writing.

Notices. All notices, consents, approvals, demands, requests or other communications relied on by the parties shall be in writing. Written notice shall be deemed to have been given when delivered in person to the designated representative of the Contractor or Owner for whom it is intended; or sent by U. S. Mail to the last known business address of the designated representative; or transmitted by fax machine to the last know business fax number of the designated representative. Mail notices are deemed effective upon receipt or on the third business day after the date of mailing, whichever is sooner. Fax notices are deemed effective the next business day after faxing.

Severability. Should any term or provision of this Agreement be held invalid or unenforceable in any respect, the remaining terms and provisions shall not be affected and this Agreement shall be construed as if the invalid or unenforceable term or provision had never been included.

Illegal Dumping. The Contractor shall ensure that it and all of its Subcontractors and assigns prevent illegal dumping of litter in accordance with Title 5, Texas Health and Safety Code, Chapter 365.

Ethics Matters/No Financial Interest. Contractor and its employees, agents, representatives and subcontractors have read and understand HCC's Ethics Policy, available at http://www.hccs.edu/hcc/System%20Home/Departments/Procurement_Operations/About_Procurement/Ethics%20Policy.pdf, and the HCC Vendor Conflict Interest Questionnaire, available at http://www.hccs.edu/hcc/System%20Home/Departments/Procurement_Operations/About_Procurement/Conflict%20of%20Interest%20Questionnaire.pdf, and is in compliance with said policies and applicable state ethics laws and rules. Neither Contractor nor its employees, agents, representatives or subcontractors will assist or cause HCC employees to violate HCC's Ethic's Policy, provisions described by HCC Standards of Conduct Guild, , or applicable state ethics laws or rules. Contractor represents and warrants that no member of the Board has a direct or indirect financial interest in the transaction that is the subject of this Agreement.

By signature hereon, Contractor certifies that no member of the Board of Trustees of Houston Community College, or Executive Officers, has a financial interest, directly or indirectly, in the transaction that is the subject of this contract.

BY SIGNING BELOW, the Parties have executed and bound themselves to this Agreement as of the day and year first above written.

ATTEST:

Contractor

By: _____

By: _____

Insert Contractor's Name

Date

Date

CONTENT APPROVED:
Office of Facilities Planning and Construction
Houston Community College

HOUSTON COMMUNITY COLLEGE
(Owner)

By: _____
(Original Signature)

By: _____
(Original Signature)

Name: Winston Dahse
Title: Chief Administration Officer
Facilities Planning and Construction

Name: Dr. Mary Spangler
Title: Chancellor

Date: _____

CONTENT APPROVED:
Office of General Counsel
Houston Community College

By: _____
(Original Signature)

Name: Renee Byas
Title: General Counsel

EXHIBITS

The Following Exhibits are incorporated by reference for all purposes:

UNIFORM GENERAL and SUPPLEMENTARY GENERAL CONDITIONS	Exhibit 1
SECTION 010000 MISCELLANEOUS REQUIREMENTS	Exhibit 2
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SUBCONTRACTOR PAYMENT CERTIFICATION FORM	Exhibit 15
SUBCONTRACTOR PROGRESS ASSESSMENT FORM	Exhibit 16
CITY OF HOUSTON WAGE SCALE FOR BUILDING CONSTRUCTION	Exhibit 17
CITY OF HOUSTON WAGE SCALE FOR ENGINEERING CONSTRUCTION	Exhibit 18
PAYROLL FOR CONTRACTOR'S OPTIONAL USE (U.S.) DEPT OF LABOR)	Exhibit 19

EXHIBIT 14

CONTRACTOR AND SUBCONTRACTOR PARTICIPATION FORM

Proposer/offeror presents the following participants in this solicitation and any resulting Contract. All proposers / offerors, including small businesses submitting proposals as prime contractors, are required to demonstrate good faith efforts to include prime contractors, are required to demonstrate good faith efforts to include eligible small businesses in their proposal submissions.

CONTRACTOR	Specify in Detail Type of Work to be Performed	Indicate below, the following: Small Business (SB) and Certification Status, if any (i.e. SB – COH, METRO, etc.)	Percentage of Contract Effort	Price
Business Name:				
Business Address:				
Telephone No. :				
Contact Person Name/E-mail:				
SMALL BUSINESS SUBCONTRACTOR(S) (Attach separate sheet if more space is needed.)				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
NON-SMALL BUSINESS SUBCONTRACTOR(S) (Attach separate sheet if more space is needed.)				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				
Business Name:				
Business Address:				
Telephone No. :				
Contact Person:				

Business Name: _____ Submitted By (Name): _____

Address: _____

Telephone/Fax: _____ Date: _____

Contractor 's Price/Total:	\$ _____
Small Business	
Subcontractor (s)Price/Total:	\$ _____
Non-Small Business	
Subcontractors Price/Total:	\$ _____
Grand Total:	\$ _____

EXHIBIT 15

**HOUSTON COMMUNITY COLLEGE
SUBCONSULTANTS/SUBCONTRACTORS/SUPPLIERS PAYMENT CERTIFICATION FORM**

- Instructions:** 1. This form shall be completed and signed by an officer of the subcontractor's company for each payment received from the prime contractor and shall be returned to the prime contractor for its submission to HCC.
2. The prime contractor shall submit this completed form with the invoice on a monthly basis.

PROJECT NO./TITLE: 11-38 Stafford Campus Renovations - Bldg B

NAME OF SUBCONTRACTOR: _____

ADDRESS: _____

I hereby certify that the above firm has received payment on _____ from _____
(Date) (Prime Contractor)

In the amount of \$ _____ as full payment of our Invoice No. _____ dated _____

for work performed during _____ under Contract/Project No. 11-38.
(Enter Time Period)

Signature: _____

Name (Print or Type) : _____

Title: _____

Date: _____

Telephone: _____

EXHIBIT 16

**HOUSTON COMMUNITY COLLEGE
SUBCONTRACTOR PROGRESS ASSESSMENT FORM**

Project No./Title: 11-38 Stafford Campus Renovations - Bldg B

Reporting Period: From _____ To _____

Prime Contractor: _____

Total Contract Amount (Prime Contractor): \$ _____

Instructions: This form shall be completed and signed by an officer of the prime contractor's company and shall be attached to each invoice for payment submitted to HCC's Accounting Dept.

List Subcontractor(s) name below	Total Subcontract Amount	Amount Paid This Period	Total Paid to Date
	\$	\$	\$

I hereby certify that _____ has made timely payments from proceeds of prior payments, and will
(Prime Contractor)
make payments within five (5) calendar days of receipt of funds now due from HCC to our subcontractor(s) in accordance with the contractual arrangements with them.

Signature: _____

Name (Print or Type): _____

Title: _____

Date: _____

Telephone: _____

EXHIBIT 17

Document 00821

WAGE SCALE FOR BUILDING CONSTRUCTION

- 1.01 Contractor and its Subcontractors must pay the general prevailing wage rates for building construction for each craft or type of worker or mechanic employed in the execution of any building construction or repair under the Contract in accordance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91 and 2006-168, and 2011-387 all as amended from time to time. City Council has determined the prevailing wage rate in the locality in which the work is being performed, which is set forth in Exhibit "A".
- 1.02 In bidding, Contractor warrants and represents that it has carefully examined the classifications for each craft or type of worker needed to execute the Contract and determined that such classifications in Exhibit "A" include all necessary categories to perform the work under the Contract.
- 1.03 If Contractor believes that an additional classification for a particular craft or type of worker is necessary to perform work under the Contract, it must submit with its bid a request to the Affirmative Action & Contract Compliance Division of the Mayor's office ("AA") to use an additional labor classification not listed in Exhibit "A" and specify the proposed new classification. AA shall determine whether a proposed classification is already covered in Exhibit "A", and, if it is, specify which classification is appropriate. AA's decision is conclusive. If AA decides that a new classification is necessary, it will determine the appropriate prevailing wage rate for any resurveyed, amended, new, or additional craft or type of worker not covered by Exhibit "A". Such determination must be decided in accordance with procedures established by AA, and in compliance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91, 2006-168, and 2011-387 subject to City Council approval.
- 1.04 Contractor must not use any labor classification not covered by Exhibit "A" until such classification is established and approved for use by AA.
- A Contractor or Subcontractor who violates Chapter 2258 of the Texas Government Code must pay to the City, \$60 per each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates set forth in Exhibit "A".
- 1.05 The City may withhold money required to be withheld under Chapter 2258 of the Texas Government Code from the final payment to Contractor or earlier payments if City Council makes a determination that there is good cause to believe that Contractor has not complied with these provisions and Chapter 2258 of the Government Code, in which case the City may withhold the money at any time subsequent to the finding by City Council.

- 1.06 Contractor and Subcontractors must keep records specifying:
- (1) the name and classification of each worker employed under the Contract; and
 - (2) the actual per diem wages paid to each worker, and the applicable hourly rate.
- The records must be open at all reasonable hours for inspection by the officers and agents of the City.
- 1.07 The prevailing wage rate does not prohibit the payment of more than the rates stated.
- 1.08 The hourly cost of salary for non-exempt workers for labor in excess of 40 hours per worker per week, shall be calculated at 1.5 times the worker's base pay, plus 1.0 times fringe benefits, for the applicable craft and level.
- 1.09 The wage scale for building construction is to be applied to work on a building including an area within 5 feet of the exterior wall.

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CITY OF HOUSTON, TEXAS
LABOR CLASSIFICATIONS AND PREVAILING WAGE RATES
FOR
BUILDING CONSTRUCTION
2011

Worker Classification	Ratio	Base Rate	Fringe Benefit	Wage Total
Asbestos Worker/Insulator	Ratio 1/1 - Apprentice	\$19.93	\$8.30	\$28.23
Asbestos Abatement Worker	Ratio 1/1 - Apprentice	\$14.00	\$0.00	\$14.00
Boilermaker	Ratio 5/1 - Apprentice	\$25.02	\$14.46	\$39.48
Brick Layer	Ratio 1/3 - Apprentice	\$18.00	\$0.00	\$18.00
Carpenter (including acoustical ceiling work)	Ratio 2/1 - Apprentice	\$21.00	\$6.43	\$27.43
Cement Mason/Concrete Finisher	Ratio 1/3 - Apprentice	\$12.83	\$0.00	\$12.83
Drywall Finisher/Taper	Ratio 1/3 - Helper \$8.54	\$12.13	\$1.01	\$13.14
Drywall Hanger, incl. metal studs installation	Ratio 1/3 - Helper \$9.46	\$12.96	\$1.59	\$14.55
Electrician	Ratio 3/2 - Apprentice	\$24.85	\$7.61	\$32.46
Elevator Mechanic	Ratio 1/1 - Apprentice	\$32.73	\$16.50	\$49.23
Formbuilder/Formsetter	Ratio 1/3 - Helper \$7.67	\$11.82	\$0.00	\$11.82
Glazier	Ratio 1/3 - Helper \$11.51	\$14.92	\$2.78	\$17.70
Insulator (Batt and Foam)	Ratio 1/3 - Helper \$6.50	\$10.00	\$0.00	\$10.00
Ironworker (Reinforcing)	Ratio 1/3 - Helper \$7.83	\$12.06	\$0.00	\$12.06
Ironworker (Structural)	Ratio 1/3 - Helper \$10.19	\$15.68	\$0.00	\$15.68
Lather	Ratio 1/3 - Helper \$13.38	\$16.90	\$3.61	\$20.51
Painter (Brush, Roller, and Spray)	Ratio 1/3 - Helper \$7.42	\$11.17	\$0.00	\$11.17
Pipe Fitter (HVAC Pipe only)	Ratio 1/3 - Apprentice	\$27.07	\$9.56	\$36.63
Pipe Fitter (Excluding HVAC)	Ratio 1/1 - Apprentice	\$19.20	\$8.23	\$27.43
Plasterer	Ratio 1/3 - Apprentice	\$19.42	\$1.00	\$20.42
Plumber	Ratio 2/1 - Apprentice	\$27.79	\$8.84	\$36.63
Roofer	Ratio 1/3 - Helper \$7.85	\$11.51	\$0.57	\$12.08
Sheet Metal Worker (incl. HVAC duct and system install.)	Ratio 3/1 - Apprentice	\$24.20	\$9.28	\$33.48
Sprinkler Fitter (Fire sprinklers)	Ratio 1/1 - Apprentice	\$25.30	\$13.30	\$38.60
Tile Finisher	Ratio 1/3 - Helper \$8.08	\$12.00	\$0.43	\$12.43
Tile Setter	Ratio 1/3 - Helper \$10.91	\$15.70	\$1.09	\$16.79
Truck Driver		\$10.78	\$1.57	\$12.35
Laborers:				
Common Laborer		\$9.29	\$0.00	\$9.29
Mason Tender (Brick)		\$10.13	\$0.00	\$10.13
Mason Tender (Cement)		\$9.86	\$0.00	\$9.86
Pipe Layer		\$12.35	\$0.00	\$12.35
Plaster Tender		\$12.90	\$2.51	\$15.41
Power Equipment Operator:				
Asphalt Paver		\$13.50	\$0.25	\$13.75
Backhoe		\$12.54	\$0.00	\$12.54
Crane		\$17.95	\$3.56	\$21.51
Forklift		\$15.46	\$5.15	\$20.61
Slab and Wall Saw		\$15.54	\$3.83	\$19.37
Welders - Receive rate prescribed for craft performing operation in which welding is incidental				
* When Apprentices are shown, Helpers cannot be utilized				

Ordinance No. 2011-387 passed March 25, 2006

**Building Construction Prevailing Wages
Classification Definitions**

Adoption: March 25, 2011

ASBEOO22-002 06/01/2004

Asbestos Worker/Insulator * - Ratio 1/1 Apprentice

(Including application of all insulating materials, protective coverings, coatings and finishing to all type of mechanical systems). Applies insulating material to exposed surfaces of structures, such as air ducts, hot and cold pipes, storage tanks, and cold storage rooms: Reads blueprints and selects required insulation material (in sheet, tubular, or roll form), such as fiberglass, foam rubber, styrofoam, cork, or urethane, based on material's heat retaining or excluding characteristics. Brushes adhesives on or attaches metal adhesive-backed pins to flat surfaces as necessary to facilitate application of insulation material. Measures and cuts insulation material to specified size and shape for covering flat or round surfaces, using tape measure, knife, or scissors. Fits, wraps, or attaches required insulation material around or to structure, following blueprint specifications. Covers or seals insulation with preformed plastic covers, canvas strips, sealant, or tape to secure insulation to structure, according to type of insulation used and structure covered, using staple gun, trowel, paintbrush, or caulking gun.

SUTX2005-010 03/24/2005

Asbestos Abatement Worker * (Ceilings, Floors, & Walls only)

Ratio 1/1 Apprentice

Removes asbestos from ceilings, walls, beams, boilers, and other structures, following hazardous waste handling guidelines: Assembles scaffolding and seals off work area, using plastic sheeting and duct tape. Positions mobile decontamination unit or portable showers at entrance of work area. Builds connecting walkway between mobile unit or portable showers and work area, using hand tools, lumber, nails, plastic sheeting, and duct tape. Positions portable air evacuation and filtration system inside work area. Sprays chemical solution over asbestos covered surfaces, using tank with attached hose and nozzle, to soften asbestos. Cuts and scrapes asbestos from surfaces, using knife and scraper. Shovels asbestos into plastic disposal bags and seals bags, using duct tape. Cleans work area of loose asbestos, using vacuum, broom, and dustpan. Places asbestos in disposal bags and seals bags, using duct tape. Dismantles scaffolding and temporary walkway, using hand tools, and places plastic sheeting and disposal bags into transport bags. Seals bags, using duct tape, and loads bags into truck.

B01L0074-002 01/01/2005

Boilermaker * - Ratio 5/1 Apprentice

Assembles, analyzes defects in, and repairs boilers, pressure vessels, tanks, and vats in field, following blueprints and using hand tools and portable power tools and equipment: Locates and marks reference points for columns or plates on foundation, using master straightedge, squares, transit, and measuring tape, and applying knowledge of geometry. Attaches rigging or signals crane operator to lift parts to specified position. Aligns structures or plate sections to assemble boiler frame, tanks, or vats, using plumb bobs, levels, wedges, dogs, or turnbuckles. Hammers, flame cuts, files, or grinds irregular edges of sections or structural parts to facilitate fitting edges together. Bolts or arc-welds structures and sections together. Positions drums and headers into supports and bolts or welds supports to frame. Aligns water tubes and connects and expands ends to drums and headers, using tube expander. Bells, beads with power hammer, or welds tube ends to ensure leak proof joints. Bolts or welds casing sections, uptakes, stacks, baffles, and such fabricated parts as chutes, air heaters, fan stands, feeding tube, catwalks, ladders, coal hoppers, and safety hatch to frame, using wrench. Installs manholes, hand holes, valves, gauges, and feed water connection in

drums to complete assembly of water tube boilers. Assists in testing assembled vessels by pumping water or gas under specified pressure into vessel and observing instruments for evidence of leakage. Repairs boilers or tanks in field by unbolting or flame cutting defective sections or tubes, straightening plates, using torch or jacks, installing new tubes, fitting and welding new sections and replacing worn lugs on bolts. May rivet and caulk sections of vessels, using pneumatic riveting and caulking hammers.

Bricklayer * (See Mason Tender) - Ratio 1/3 Apprentice

Lays building materials, such as brick, structural tile, and concrete cinder, glass, gypsum, and terra cotta block (except stone) to construct or repair walls, partitions, arches, sewers, and other structures: Measures distance from reference points and marks guidelines on working surface to lay out work. Spreads soft bed (layer) of mortar that serves as base and binder for block, using trowel. Applies mortar to end of block and positions block in mortar bed. Taps block with trowel to level, align, and embed in mortar, allowing specified thickness of joint. Removes excess mortar from face of block, using trowel. Finishes mortar between brick with pointing tool or trowel. Breaks bricks to fit spaces too small for whole brick, using edge of trowel or brick hammer. Determines vertical and horizontal alignment of courses, using plumb bob, gauge line (tightly stretched cord), and level. Fastens brick or terra cotta veneer to face of structures, with tie wires embedded in mortar between bricks, or in anchor holes in veneer brick. May weld metal parts to steel structural members. May apply plaster to walls and ceiling, using trowel, to complete repair work.

CARPO551-001 04/01/2005

Carpenter * (Including Acoustical Ceiling Work) - Ratio 2/1 Apprentice

Constructs, erects, installs, and repairs structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools, and conforming to local building codes: Studies blueprints, sketches, or building plans for information pertaining to type of material required, such as lumber or fiberboard, and dimensions of structure or fixture to be fabricated. Selects specified type of lumber or other materials. Prepares layout, using rule, framing square, and calipers. Marks cutting and assembly lines on materials, using pencil, chalk, and marking gauge. Shapes materials to prescribed measurements, using saws, chisels, and planes. Assembles cut and shaped materials and fastens them together with nails, dowel pins, or glue. Verifies trueness of structure with plumb bob and carpenter's level. Erects framework for structures and lays subflooring. Builds stairs and lays out and installs partitions and cabinetwork. Covers sub floor with building paper to keep out moisture and lays hardwood, parquet, and wood-strip-block floors by nailing floors to sub floor or cementing them to mastic or asphalt base. Applies shock-absorbing, sound-deadening, and decorative paneling to ceilings and walls. Fits and installs prefabricated window frames, doors, doorframes, weather stripping, interior and exterior trim, and finish hardware, such as locks, letter drops, and kick plates. Constructs forms and chutes for pouring concrete. Erects scaffolding and ladders for assembling structures above ground level. May weld metal parts to steel structural members.

Cement Mason/Concrete Finisher (See Concrete Mason/Concrete Finisher) - Ratio 1/3 Apprentice

Finisher; concrete floater Smooths and finishes surfaces of poured concrete floors, walls, sidewalks, or curbs to specified textures, using hand tools or power tools, including floats, trowels, and screeds: Signals concrete deliverer to position truck to facilitate pouring concrete. Moves discharge chute of truck to direct concrete into forms. Spreads concrete into inaccessible sections of forms, using rake or shovel. Levels concrete to specified depth and workable consistency, using hand held screed and floats to bring water to surface and produce soft topping. Smooths, and shapes surfaces of freshly poured concrete, using straightedge and float or power screed. Finishes concrete surfaces, using power trowel, or wets and rubs concrete with abrasive stone to impart finish. Removes rough or defective spots from concrete surfaces, using power grinder or chisel and hammer, and patches holes with fresh concrete or epoxy compound. Molds expansion joints and edges, using edging tools, jointers, and straightedge. May sprinkle colored stone chips, powdered steel, or coloring powder on concrete to produce prescribed finish. May produce rough concrete surface, using broom. May mix cement, using hoe or concrete-mixing machine. May direct sub grade work, mixing of concrete, and setting of forms.

Drywall Finisher/Taper - Ratio 1/3 Helpers

Wallboard and plasterboard; sheetrock taper; taper and bedder; taper and floater Seals joints between plasterboard or other wallboards to prepare wall surface for painting or papering; Mixes sealing compound by hand or with portable electric mixer, and spreads compound over joints between boards, using trowel, broad knife, or spatula. Presses paper tape over joint to embed tape into compound and seal joint, or tapes joint, using mechanical applicator that spreads compound and embeds tape in one operation. Spreads and smoothes cementing material over tape, using trowel or floating machine to blend joint with wall surface. Sands rough spots after cement has dried. Fills cracks and holes in walls and ceiling with sealing compound. Installs metal molding at corners in lieu of sealant and tape. Usually works as member of crew. May apply texturing compound and primer to walls and ceiling preparatory to final finishing, using brushes, roller, or spray gun. May countersink nails or screws below surface of wall prior to applying sealing compound, using hammer or screwdriver.

Drywall Hanger (Includes Installing Metal Studs) - Ratio 1/3 Helpers

Dry-wall installer; gypsum dry-wall systems installer Plans gypsum drywall installations, erects metal framing and furring channels for fastening drywall, and installs drywall to cover walls, ceilings, soffits, shafts, and movable partitions in residential, commercial, and industrial buildings: Reads blueprints and other specifications to determine method of installation, work procedures, and material, tool, and work aid requirements. Lays out reference lines and points for use in computing location and position of metal framing and furring channels and marks position for erecting metalwork, using chalk line. Measures, marks, and cuts metal runners, studs, and furring channels to specified size, using tape measure, straightedge and hand and portable power cutting tools. Secures metal framing to walls and furring channels to ceilings, using hand and portable power tools. Measures and marks cutting lines on drywall, using square, tape measure, and marking devices. Scribes cutting lines on drywall, using straightedge and utility knife and breaks board along cut lines. Fits and fastens board into specified position on wall, using screws, hand tools, portable power tools, or adhesive. Cuts openings into board for electrical outlets, vents, or fixtures, using keyhole saw or other cutting tools. Measures, cuts, assembles, and installs metal framing and decorative trim for windows, doorways, and vents. Fits, aligns, and hangs doors and installs hardware, such as locks and kick plates

ELECO716-002 09/01/2004

Electrician * (Including Pulling Wire and Low Voltage Wiring and Installation of Fire Alarms, Security Systems, Telephones, and Computers.) - Ratio 3/2 Apprentice

Plans layout, installs, and repairs wiring, electrical fixtures, apparatus, and control equipment: Plans new or modified installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring, consistent with specifications and local electrical codes. Prepares sketches showing location of wiring and equipment, or follows diagrams or blueprints, ensuring that concealed wiring is installed before completion of future walls, ceilings, and flooring. Measures, cuts, bends, threads, assembles, and installs electrical conduit, using tools, such as hacksaw, pipe threader, and conduit bender. Pulls wiring through conduit. Splices wires by stripping insulation from terminal leads, using knife or pliers, twisting or soldering wires together, and applying tape or terminal caps. Connects wiring to lighting fixtures and power equipment, using hand tools. Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels, fastening in place with screws or bolts, using hand tools and power tools. Connects power cables to equipment, such as electric range or motor, and installs grounding leads. Tests continuity of circuit to ensure electrical compatibility and safety of components, using testing instruments, such as ohmmeter, battery and buzzer, and oscilloscope. Observes functioning of installed equipment or system to detect hazards and need for adjustments, relocation, or replacement.

ELEVOO31-001 01/01/2005

Elevator Mechanic * - Ratio 1/1 Apprentice

FOOTNOTES: a. - Employer contributes 8% of basic hourly rate for over 5 years' service and 6% of basic hourly rate for 6 months to 5 years' service as Vacation Pay Credit. Paid Holidays: New Year's Day; Memorial Day; Independence Day Labor Day; Thanksgiving Day; Friday after Thanksgiving Day; Christmas Day

Erector; elevator installer; elevator mechanic Assembles and installs electric and hydraulic freight and passenger elevators, escalators, and dumbwaiters, determining layout and electrical connections from blueprints: Studies blueprints and lays out location of framework, counterbalance rails, motor pump, cylinder, and plunger foundations. Drills holes in concrete or structural steel members with portable electric drill. Secures anchor bolts or welds brackets to support rails and framework, and verifies alignment with plumb bob and level. Cuts prefabricated sections of framework, rails, and other elevator components to specified dimensions, using acetylene torch, power saw, and disk grinder. Installs cables, counterweights, pumps, motor foundations, escalator drives, guide rails, elevator cars, and control panels, using hand tools. Connects electrical wiring to control panels and electric motors. Installs safety and control devices. Positions electric motor and equipment on top of elevator shaft, using hoists and cable slings.

Formbuilder/Formsetter - Ratio 1/3 Helpers

Constructs built-in-place or prefabricated wooden forms, according to specifications, for molding concrete structures: Studies blueprints and diagrams to determine type and dimension of forms to be constructed. Saws lumber to blueprint dimensions, using handsaw or power saw, and nails lumber together to make form panels. Erects built-in-place forms or assembles and installs prefabricated forms on construction site according to blueprint specifications, using hand tools, plumb rule, and level. Inserts spreaders and tie rods between opposite faces of form to maintain specified dimensions. Anchors and braces forms to fixed objects, using nails, bolts, anchor rods, steel cables, planks, and timbers.

Glazier - Ratio 1/3 Helpers

Installs glass in windows, skylights, store fronts, and display cases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops: Marks outline or pattern on glass, and cuts glass, using glasscutter. Breaks off excess glass by hand or with notched tool. Fastens glass panes into wood sash with glaziers points, and spreads and smoothes putty around edge of panes with knife to seal joints. Installs mirrors or structural glass on building fronts, walls, ceilings, or tables, using mastic, screws, or decorative molding. Bolts metal hinges, handles, locks, and other hardware to prefabricated glass doors. Sets glass doors into frame and fits hinges. May install metal window and doorframes into which glass panels are to be fitted. May press plastic adhesive film to glass or spray glass with tinting solution to prevent light glare. May install stained glass windows.

Insulator (Batt and Foam) - Ratio 1/3 Helpers

Applies batt and form insulation to walls, ceilings and other surfaces according to manufacturers specifications and blue print instructions. May use sealants such as cement plaster or asphalt compound to seal insulation; may spread concrete over floor slabs to form wearing floor: brushes adhesives, cuts insulating materials to specified shape to cover surfaces; uses tape or other sealants to adhere insulation to surfaces. May use staple gun, towel, paintbrushes and caulking guns.

Ironworker (Reinforcing) - Ratio 1/3 Helpers

Positions and secures steel bars in concrete forms to reinforce concrete; places rods in forms, spacing and fastening together with wire and pliers. Cuts bars using hacksaw, bar cutters or acetylene torch. Bends steel rods with hand tools or rod bending machine; reinforces concrete with wire mesh; welds reinforcing bars together.

Ironworker (Structural) - Ratio 1/3 Helpers

Erector; ironworker; steel erector; structural-iron erector; structural-iron worker; structural steel erector Performs any combination of following duties to raise, place, and unite girders, columns, and other structural-steel members to form completed structures or structure frameworks, working as member of crew: Sets up hoisting equipment for raising and placing structural-steel members. Fastens steel members to cable of hoist, using chain, cable, or rope. Signals worker operating hoisting equipment to lift and place steel member. Guides member, using tab line (rope) or rides on member in order to guide it into position. Pulls, pushes, or pries steel members into approximate position while member is supported by hoisting device. Forces members into final position, using turnbuckles, crowbars, jacks, and hand tools. Aligns rivet holes in member with corresponding holes in previously placed member by driving drift pins or handle of wrench through holes. Verifies vertical and horizontal alignment of members, using plumb bob and level.

Lather - Ratio 1/3 Helpers

Fastens wooden, metal, or rockboard lath to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fireproofing, or acoustical material, using hand tools and portable power tools: Erects horizontal metal framework to which laths are fastened, using nails, bolts, and studgun. Drills holes in floor and ceiling, using portable electric tool, and drives ends of wooden or metal studs into holes to provide anchor for furring or rockboard lath. Wires horizontal strips to furring to stiffen framework. Cuts lath to fit openings and projections, using hand tools or portable power tools. Wires, nails, clips, or staples lath to framework, ceiling joists, and flat concrete surfaces. Bends metal lath to fit corners, or attaches preformed corner reinforcements. Wires plasterer's channels to overhead structural framework to provide support for plaster or acoustical ceiling tile.

Painter (Brush, Roller, and Spray) - Ratio 1/3 Helpers

Applies coats of paint, varnish, stain, enamel, or lacquer to decorate and protect interior or exterior surfaces, trimmings, and fixtures of buildings and other structures: Reads work order or receives instructions from supervisor or homeowner regarding painting. Smooths surfaces, using sandpaper, brushes, or steel wool, and removes old paint from surfaces, using paint remover, scraper, wire brush, or blowtorch to prepare surfaces for painting. Fills nail holes, cracks, and joints with caulk, putty, plaster, or other filler, using caulking gun and putty knife. Selects premixed paints, or mixes required portions of pigment, oil, and thinning and drying substances to prepare paint that matches specified colors. Removes fixtures, such as pictures and electric switchcovers, from walls prior to painting, using screwdriver. Spreads dropcloths over floors and room furnishings, and covers surfaces, such as baseboards, doorframes, and windows with masking tape and paper to protect surfaces during painting. Paints surfaces, using brushes, spray gun, or paint rollers. Simulates wood grain, marble, brick, or tile effects. Applies paint with cloth, brush, sponge, or fingers to create special effects. Erects scaffolding or sets up ladders to perform tasks above ground level.

Pipe fitter * (HVAC Pipe Only) - Ratio 1/1 Apprentice

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and airconditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following

specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using teach pendant, control panel, or keyboard and display screen of robot controller and programmable controller. May be designated Steam Fitter (construction) when installing piping systems that must withstand high pressure.

PLUMO211-003 04/01/2004

Pipe Fitter * (Excluding HVAC) - Ratio see Journeyman / Apprentice schedule

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe-threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and airconditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks.

PLASOO79-001 07/01/2004

Plasterer * See Plaster Tender - Ratio 1/3 Apprentice

Applies coats of plaster to interior walls, ceilings, and partitions of buildings, to produce finished surface, according to blueprints, architect's drawings, or oral instructions, using hand tools and portable power tools: Directs workers to mix plaster to desired consistency and to erect scaffolds. Spreads plaster over lath or masonry base, using trowel, and smooths plaster with darby and float to attain uniform thickness. Applies scratch, brown, or finish coats of plaster to wood, metal, or board lath successively. Roughens undercoat with scratcher (wire or metal scraper) to provide bond for succeeding coats of plaster.

PLUMOO68-003 04/01/2005

Plumber * (Excluding HVAC Pipe) - Ratio 2/1 Apprentice

Assembles, installs, and repairs pipes, fittings, and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes: Studies building plans and working drawings to determine work aids required and sequence of installations. Inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe. Locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors, using ruler, spirit level, and plumb bob. Cuts openings in walls and floors to accommodate pipe and pipe fittings, using hand tools and power tools. Cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine. Bends pipe to required angle by use of pipe-bending machine or by placing pipe over block and bending it by hand. Assembles and installs valves, pipe fittings, and pipes composed of metals, such as iron, steel, brass, and lead, and nonmetals, such as glass, vitrified clay, and plastic, using hand tools and power tools. Joins pipes by use of screws, bolts, fittings, solder, plastic solvent, and caulks joints. Fills pipe system with water or air and reads pressure gauges to determine whether system is leaking. Installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers,

and water softeners. Repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains.

Roofer - Ratio 1/3 Helpers

Covers roofs with roofing materials other than sheet metal, such as composition shingles or sheets, wood shingles, or asphalt and gravel, to waterproof roofs: Cuts roofing paper to size, using knife, and nails or staples it to roof in overlapping strips to form base for roofing materials. Installs gutters and down spouts. Aligns roofing material with edge of roof, and overlaps successive layers, gauging distance of overlap with chalkline, gauge on shingling hatchet, or by lines on shingles. Fastens composition shingles or sheets to roof with asphalt, cement, or nails. Punches holes in slate, tile, terra cotta, or wooden shingles, using punch and hammer. Cuts strips of flashing and fits them into angles formed by walls, vents, and intersecting roof surfaces. When applying asphalt or tar and gravel to roof, mops or pours hot asphalt or tar onto roof base. Applies alternate layers of hot asphalt or tar and roofing paper until roof covering is as specified. Applies gravel or pebbles over top layer, using rake or stiff bristled broom.

SHEE054-004 04/01/2004

Sheet metal worker * (Including Setting HVAC System)(Excluding HVAC Duct)

Ratio 3/1 Apprentice

Fabricates, assembles, installs and repairs sheet metal products, including sheet metal roof (also see Roofer). Operates soldering and welding equipment to join together sheet metal parts. Seals seams and joints with sealant. Installs roof sheets, trims, flashing, gutters down spouts and other related items. Performs other related duties.

SFTX0669-001 01/01/2005

Sprinkler Fitter (Fire) * - Ratio 1/1 Apprentice

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe-threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and hand tools. Secures pipes to structure with brackets, clamps, and hangers, using hand tools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using hand tools. Installs and maintains refrigeration and air conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using hand tools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using teach pendant, control panel, or keyboard and display screen of robot controller and programmable controller.

Tile Finisher - Ratio 1/3 Helpers

Supplies and mixes construction materials for TILE SETTER (construction) 861.381-054, applies grout, and cleans installed tile: Moves tiles, tile setting tools, and work devices from storage area to installation site manually or using wheelbarrow. Mixes mortar and grout according to standard formulas and request from TILE SETTER (construction), using bucket, water hose, spatula, and portable mixer. Supplies TILE SETTER (construction) with mortar, using wheelbarrow and shovel. Applies grout between joints of installed tile, using grouting trowel. Removes excess grout from tile

joints with wet sponge and scrapes corners and crevices with trowel. Wipes surface of tile after grout has set to remove grout residue and polish tile, using nonabrasive materials. Cleans installation site, mixing and storage areas, and installation machines, tools, and equipment, using water and various cleaning tools. Stores tile setting materials, machines, tools, and equipment. May apply caulk, sealers, acid, steam, or related agents to caulk, seal, or clean installed tile, using various application devices and equipment. May modify mixing, grouting, grinding, and cleaning procedures according to type of installation or material used. May assist TILE SETTER (construction) to position and secure metal lath, wire mesh, or felt paper prior to installation of tile. May cut marked tiles to size, using power saw or tile cutter.

Tile Setter - Ratio 1/3 Helpers

Applies tile to walls, floors, ceilings, and promenade roof decks, following design specifications: Examines blueprints, measures and marks surfaces to be covered, and lays out work. Measures and cuts metal lath to size for walls and ceilings with tin snips. Tacks lath to wall and ceiling surfaces with staple gun or hammer. Spreads plaster base over lath with trowel and levels plaster to specified thickness, using screed. Spreads concrete on sub floor, with trowel and levels it with screed. Spreads mastic or other adhesive base on roof deck, using serrated spreader to form base for promenade tile. Cuts and shapes tile with tile cutters and biters. Positions tile and taps it with trowel handle to affix tile to plaster or adhesive base.

Truck Driver

Drives truck with capacity of more than 3 tons, to transport materials to and from specified destinations: Drives truck to destination, applying knowledge of commercial driving regulations and area roads. Prepares receipts for load picked up. Collects payment for goods delivered and for delivery charges. May maintain truck log, according to state and federal regulations. May maintain telephone or radio contact with supervisor to receive delivery instructions. May load and unload truck. May inspect truck equipment and supplies, such as tires, lights, brakes, gas, oil, and water. May perform emergency roadside repairs, such as changing tires, installing light bulbs, tire chains, and spark plugs. May position blocks and tie rope around items to secure cargo during transit.

Laborers

Common Laborer

Performs any combination of the following tasks in erecting, repairing and wrecking buildings; dig, spread and level dirt and gravel; lift carry and hold building materials, tools and supplies; clean tools, equipment, materials and work areas; mix, pour and spread concrete, asphalt, gravel and other materials; join, wrap and seal sections of pipe; routine nonmachine tasks such as removing forms from set concrete, filling expansion joints with asphalt, and placing culverts in trench. May also signal construction equipment operators; measure distances from grade stakes, drive stakes and stretch lines; bolt, nail align and block up under forms; mix and finish poured concrete, erect scaffolding; spread paint or coating to seal surfaces; caulking compounds to seal surfaces; remove projections from concrete, and mount pipe hangers.

Mason Tender Brick (Bricklayer's Helper)

Mason Tender Cement (Concrete Mason's / Concrete Finisher's Helper)

Pipe layer

Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints.

Plaster Tender (Plaster's Helper)

Tends machine that pumps plaster or stucco through spray gun for application to ceilings, walls, and partitions of buildings: Starts and stops machine on signals from PLASTERER (construction). Fills

hopper of machine with plaster. Turns valves to regulate pump and compressor. Assists in erecting scaffolds.

Power Equipment Operator:

Asphalt Paver (operator)

Operator; bituminous-paving-machine operator; blacktop-paver operator; blacktop spreader; mechanical-spreader operator; paving-machine operator, asphalt or bituminous Operates machine that spreads and levels hot-mix bituminous paving material on sub grade of highways and streets: Bolts extensions to screed to adjust width, using wrenches. Lights burners to heat screed. Starts engine and controls paving machine to push dump truck and maintain constant flow of asphalt into hopper. Observes distribution of paving material along screed and controls direction of screed to eliminate voids at curbs and joints. Turns valves to regulate temperature of asphalt flowing from hopper when asphalt begins to harden on screed.

Backhoe (operator)

Operates power-driven machine, equipped with movable shovel, to excavate or move coal, dirt, rock, sand, and other materials: Receives written or oral instructions from supervisor regarding material to move or excavate. Pushes levers and depresses pedals to move machine, to lower and push shovel into stockpiled material, to lower and dig shovel into surface of ground, and to lift, swing, and dump contents of shovel into truck, car, or onto conveyor, hopper, or stockpile. Observes markings on ground, hand signals, or grade stakes to remove material, when operating machine at excavation site.

Crane (operator)

Operates electric-, diesel-, gasoline-, or steam-powered guy-derrick or stiff-leg derrick (mast supported by fixed legs or tripod), to move products, equipment, or materials to and from quarries, storage areas, and processes, or to load and unload trucks or railroad cars: Pushes and pulls levers and depresses pedals to raise, lower, and rotate boom and to raise and lower load line in response to signals.

Forklift (operator)

Drives gasoline-, liquefied gas-, or electric-powered industrial truck equipped with lifting devices, such as forklift, boom, scoop, lift beam and swivel-hook, fork-grapple, clamps, elevating platform, or trailer hitch, to push, pull, lift, stack, tier, or move products, equipment, or materials in warehouse, storage yard, or factory: Moves levers and presses pedals to drive truck and control movement of lifting apparatus. Positions forks, lifting platform, or other lifting device under, over, or around loaded pallets, skids, boxes, products, or materials or hooks tow trucks to trailer hitch, and transports load to designated area. Unloads and stacks material by raising and lowering lifting device.

Slab & Wall Saw (operator)

Apprentices

Apprentices may be used in any of the crafts listed above where noted, if they are currently certified in a program recognized by the Bureau of Apprenticeship and Training, U.S. Department of Labor, providing the proper ratio between journeyman and apprentice is observed. Apprentice certification certificates must be supplied with the first weekly payroll upon which the apprentice's name appears.

Helper (65% of the journeyman classification)

(Must not exceed 3 helpers to 1 journeyman)

A Helper is a semi-skilled worker (rather than a skilled journeyman) who works under the direction of and assists a journeyman. Under the journeyman's direction and supervision, the helper performs a variety of duties to assist the journeyman such as preparing, carrying, and furnishing equipment,

supplies and maintaining them in order; cleaning and preparing work areas; lifting, positioning, and holding materials or tools; and other related semi-skilled tasks as directed by the journeyman. A helper may use the tools of the trade at and under the direction of the journeyman. The particular duties performed by a helper vary according to area practice. The journeyman must work in close proximity to the location of the helpers work area. The helpers wage rate shall be calculated at no less than 65% of the prevailing wage for that journeyman's classification.

Helper who assists more than one journeyman craft should be listed with the notation indicating each journeyman craft classification they assist.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

PLUMO211-003 04/01/2004

Pipe fitters * Apprentice Schedule (Excluding HVAC Pipe)

Journeyman	Indentured Apprentice	Apprentice Applicant	Total
1	1	0	1 to 1
3	2	1	3 to 3
5	3	2	5 to 5
8	4	3	8 to 7
12	5	4	12 to 9
16	6	5	16 to 11
20	7	6	20 to 13
25	8	7	25 to 15
30	9	8	30 to 17
40	10	9	40 to 19
50	11	10	50 to 21

NOTE: Continue after 50 Journeyman — ONE (1) Indentured Apprentice and one (1) Apprentice Applicant for every ten (10) Journeyman

*** When Apprentices are shown, Helpers cannot be utilized**

If there are questions as to the classification of a worker, contact the Contract Compliance Officer in writing with a description of the work the worker will be performing. After review the Contract Compliance Officer will respond in writing with the classification and wage rate to be paid the worker in question.

END OF DOCUMENT

EXHIBIT 18
Document 00820

WAGE SCALE FOR ENGINEERING CONSTRUCTION

- 1.01 In accordance with the Prevailing Wage Law on Public Works (Chapter 2258 of the Texas Government Code), the public body awarding the Contract does hereby specify the following to be the general prevailing rates in the locality in which the Work is being performed.
- 1.02 This prevailing wage rate does not prohibit the payment of more than the rates stated.
- 1.03 The wage scale for engineering construction is to be applied to all site work greater than 5 feet from an exterior wall of new building under construction or from an exterior wall of an existing building.
- 1.04 If Contractor believes that an additional classification for a particular craft or type of worker is necessary to perform work under the Contract, it must submit with its bid a request to the Affirmative Action & Contract Compliance Division of the Mayor's office ("AA") to use an additional labor classification not listed in Exhibit "A" and specify the proposed new classification. AA shall determine whether a proposed classification is already covered in Exhibit "A", and, if it is, specify which classification is appropriate. AA's decision is conclusive. If AA decides that a new classification is necessary, it will determine the appropriate prevailing wage rate for any resurveyed, amended, new, or additional craft or type of worker not covered by Exhibit "A". Such determination must be decided in accordance with procedures established by AA, and in compliance with Chapter 2258 of the Texas Government Code and City of Houston, Texas Ordinance Nos. 85-2070, 2000-1114, 2001-152, 2006-91, 2006-168 and 2009-247 subject to City Council approval.

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02-01-201

**CITY OF HOUSTON
STANDARD DOCUMENT**

**WAGE SCALE
FOR ENGINEERING CONSTRUCTION**

**LABOR CLASSIFICATIONS AND PREVAILING WAGE RATES
FOR
ENGINEERING CONSTRUCTION**

2011 CLASSIFICATION	RATE	CLASSIFICATION	RATE
Asphalt Distributor Operator	\$10.94	Milling Machine Operator - Fine Grade	\$13.17
Asphalt Paving Machine Operator	\$12.01	Mixer Operator	\$10.33
Asphalt Raker	\$11.13	Motor Grader Operator- Rough	\$13.13
Asphalt. Shoveler	\$9.14	Motor Grader Operator	\$11.67
Broom or Sweeper Operator	\$11.19	Oiler	\$12.12
Bulldozer Operator	\$11.81	Painter-Structures	\$15.54
Carpenter- Rough	\$12.49	Pavement Marking Machine Operator	\$8.18
Concrete Finisher- Paving	\$11.38	Pile Driverman.	\$12.22
Concrete Finisher- Structures	\$10.80	Pipe Layer	\$9.49
Concrete Paving Curbing Machine Operator	\$10.00	Reinforcing Steel Setter - Paving	\$15.14
Concrete Paving Finishing Machine Operator	\$13.07	Reinforcing Steel Setter - Structure	\$13.87
Concrete Paving Joint Sealer Operator	\$11.00	Roller Operator, Pneumatic - Self-propelled	\$9.91
Concrete Paving. Saw Operator .	\$12.75	Roller Operator, Steel Wheel, Flat Wheel/Tamping	\$10.43
Concrete Paving Spreader Operator.	\$10.44	Roller Operator, Steel Wheel, Plant Mix Pavement	\$11.07
Concrete Rubber . . .	\$9.00	Scraper Operator	\$9.92
Crane Clamshell Backhoe Derrick, Dragline, Shovel Operator	\$12.71	Servicer	\$10.96
Crusher and Screening Plant Operator	\$11.29	Sign Installer - PGM	\$8.54
Electrician * 3 Journeyman 2 Apprentice	\$21.79	Slip Form Machine Operator	\$11.07
Flagger	\$9.42	Spreader Box Operator	\$11.12
Form Builder/Setter- Structures	\$10.50	Structural Steel Worker	\$12.13
Form Liner- Paving and Curb	\$11.75	Tractor Operator - Crawler Type	\$13.00
Form Setter- Paving and Curb	\$10.51	Tractor Operator- Pneumatic	\$10.07
Foundation Drill Operator - Crawler Mounted	\$15.00	Transit Mixer Truck Driver	\$11.00
Foundation Drill Operator - Truck Mounted	\$12.73	Truck Driver, Lowboy-float	\$13.16
Front Loader Operator	\$10.65	Truck Driver, Single-Axle - Heavy	\$10.65
Laborer Common	\$9.15	Truck Driver, Single-Axle - Light	\$10.07
Laborer- Utility	\$9.81	Truck Driver, Tandem Axle Semi-Trailer	\$10.25
Manhole Builder	\$9.00	Work Zone Barricade Servicer	\$9.94
Mechanic	\$13.72	Welders – Receive rate prescribed for crafts performing Operation to which welding is incidental.	
* Apprentices- must be in an approved USDOL Program and cannot exceed ratios			

Ordinance No. 2009-247 passed March 25, 2009

00820-1
02-01-2011

**Engineering Prevailing Wages
Classification Definitions**

Adoption: February 1, 2011

Asphalt Distributor Operator

Drives distributor truck, sets spray bars and operates valves and levers to control distribution of bituminous material for highway surfacing. May oil, grease or otherwise service and make adjustments to equipment as needed. Performs other related duties.

Asphalt Paving Machine Operator

Operates paving machine that spreads and levels asphaltic concrete on highway subgrade. Controls movement of machine, raises and lowers screed, regulates width of screed. May, oil, grease, service and make adjustments to equipment as needed. Performs other related duties.

Asphalt Raker

Distributes asphaltic materials evenly over road surface by raking and brushing material to correct thickness; directs Laborers when to add or take away material to fill low spots or to reduce high spots. Performs other related duties.

Asphalt Shoveler

A general term used on construction work covering many unskilled classifications requiring work of a physical nature. A laborer works with all crews doing everything from pick and shovel work to cleaning up lumber with hammer, shoveling and placing concrete, uses air tools, cleans concrete joints and fills joints with sealing compound from bucket or with hose and nozzle from a central source, applies coating of oil to inside face of forms, may help set and strip forms, unloads and transports reinforcing steel, cures newly poured concrete, helps lower pipe into ditch for pipelayers, builds fences, works with dirt crew keeping construction layout stakes out of the way of dirt moving equipment.

Broom or Sweeper Operator

Operates a self-propelled machine to sweep and clean roadway surfaces. May oil grease, service and make adjustments to equipment as needed. Performs other related duties.

Bulldozer Operator

Operates a crawler tractor with a bulldozer mounted in front of chassis to level, distribute and push earth or other material. May operate a ripper attachment to break up rock or other hard material. May use a push block on front of tractor to push load scrapers. May oil grease, or otherwise service and make minor repairs to equipment as needed. Performs other related duties.

Carpenter, Rough

Works from plans to build, assemble, fit together, align, plum, and set in place forms for molding concrete structures. Forms may be wood, steel, aluminum, fiberglass or any other type of material. Checks form while concrete is placed. May install miscellaneous materials integral to concrete structures. May set precast concrete elements. Prepares for slipforming traffic rail and median barrier. May install permanent metal deck forms. May work with power tools Performs other related duties.

Concrete Finisher, Paving

Finishes the exposed surfaces of fresh concrete paving, median barrier and every element of concrete structures to the final grade and contour structures to the final grade and contour with the use of straight edges and steel trowels. Operates bridge deck finishing machine. Finishes concrete curbs and gutters. Finishes exposed surface of concrete after forms have been removed by patching imperfections with fresh concrete, rubbing surface with abrasive stone, and directing others in removing excess or defective concrete with power tools. Performs other related duties.

Concrete Finisher, Structures

A worker semi-skilled in concrete finishing who assists Concrete finisher by performing specific or general duties of lesser skill and keeping Concrete Finisher supplied with materials, tools, and supplies; cleaning working area an equipment; and holding materials and tools. Performs other related duties.

00820-1
02-01-2011

Concrete Paving Curbing Machine Operator

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Paving Finishing Machine Operator

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Paving Joint Sealer Operator

Cleans and seals joints requiring a hot or cold sealing compound in concrete paving, sidewalks, driveway and approach slabs. May oil, grease or make necessary repairs adjustments to equipment as needed. Performs other related duties.

Concrete Paving Saw Operator

Operates a water-cooled power saw with either or an abrasive blade to saw expansion and contraction joints in concrete paving. May also be used to saw asphaltic pavements. May oil grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Concrete Paving Spreader Operator

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Rubber

Finishes the exposed surface of concrete masonry after the forms have been removed by patching holes and broken corners with fresh concrete, rubbing surface with abrasive stone to remove rough spots, and removing high spots and defective concrete with hand chisel and hammer or pneumatic chisel and powered abrasive stone. Performs other related duties.

Crane, Clamshell, Backhoe, Derrick, Dragline, Shovel Operator

A worker who operates a lattice boom type crane can hoist and move materials, raise and lower heavy weights and perform other related operations. May be crawler type or rubber tired. May include placement of rock riprap, clamshell, dragline, pipe and pile driving operations. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Crusher and Screed Plant Operator

Operates a crusher or screening plant through which rock is run to break it into crushed stone for construction or to control flow of materials not needed. May include minor repairs and may service and make necessary adjustments to equipment as needed. Performs other related duties.

Electrician *3 Journeyman 2 Apprentice

Plans and directs the layout of metal electrical conduit, installs wiring systems, switch-panels, buss bars, works on overhead distribution systems and underground distribution systems. Performs other related duties.

Flagger

A worker who directs traffic in or around a construction site. May use signs or devices to direct traffic. May help assemble, position and clean devices or equipment used to direct traffic. Must be able to effectively communicate with the public. May require certain level of training by TXDOT specifications. Performs other related duties.

Form Builder/Setter, Structures

Fits together, aligns and sets to grade metal and wooden forms for placement of concrete. Forms may be wood, steel, aluminum, fiberglass or any other type of material. Checks forms while concrete is placed. May install miscellaneous materials integral to concrete structures. May set precast concrete elements. Prepares for slipforming traffic rail and median barrier. May install permanent metal deck forms. May work with power tools. Performs other related duties.

Form Liner, Paving & Curb

Fits together, panels align and sets to grade metal and wooden forms for placement of concrete. Works with survey crew to set stringline for panels or moles. Performs other related duties.

Form Setter, Paving & Curb

Fits together, align and set to grade metal and wooden forms for placement of concrete paving and curbs. Works with survey crew to set stringline for paving, curb and gutter curb. Performs other related duties.

Foundation Drill Operator, Crawler Mounted

Operates a hole-drilling machine that is crawler mounted. May include geotechnical operations such as soils nails, rock nails, tiebacks, anchors and jet grouting. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Foundation Drill Operator, Truck Mounted

Operates a hole drilling machine that is mounted on the rear of a rubber tired vehicle or truck. May include soils nails, rock nails, tiebacks, anchors and jet grouting. Drive truck from location to location or may have laborer who drives truck. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Front End Loader Operator

Operates a rubber tired, skid steer or crawler type tractor with an attached scoop type bucket on front end. Machine is used to load materials from stockpiles, excavation, charging batch plants, loading and unloading trucks. May be used with attachments in lieu of the bucket. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Laborer, Common

A general term used on construction work covering many unskilled classifications requiring work of a physical nature. A laborer works with all crews doing everything from pick and shovel work to cleaning up lumber with hammer, shoveling and placing concrete, uses air tools, cleans concrete joints and fills joints with sealing compound from bucket or with hose and nozzle from a central source, applies coating of oil to inside face of forms, may help set and strip forms, unloads and transports reinforcing steel, cures newly poured concrete, helps lower pipe into ditch for pipelayers, builds fences, works with dirt crew keeping construction layout stakes out of the way of dirt moving equipment.

Laborer, Utility

Performs a variety of manual duties, usually working in a utility capacity by working on multiple projects and tasks where demands require workmen with varied experience and ability to work without close direction. Unloads and transports reinforcing steel. May occasionally place and tie reinforcing steel. Directs common laborers in pouring concrete. Erects shoring and bracing. Assists in installation of pipe. Installs, operate and maintains dewatering systems. May assist equipment operators in positioning machines, verifying grades and signaling operators. Directs truck drivers and scraper operators to dumping positions to maintain grades as directed. Uses power tools and air tools. May work as lead man in a labor crew. His performance of a wide variety of construction jobs distinguishes him from a helper assigned to a specific craft. Installs and maintains erosion control. Is more or less a general utility construction worker. May be second step in learning a skill, and may later become a helper in a specific classification. Performs other related duties.

Manhole Builder

Constructs a means of permanent access to water and sewer lines for maintenance purposes. This work consists of laying brick or concrete slab at bottom of ditch up to an approximate grade line near the surface of the ground. Brick or block is normally laid to form a nearly circular manhole. Brick or block is laid in by eyesight and is normally to a plumb line. Chipped or culled brick can be used quite often is. No effort may be made to keep mortar off the face of the brick and joints are not pointed. May apply coating of concrete to interior and exterior surface. Performs other related duties.

Mechanic

Assembles, set up, adjusts and maintains and repairs all types of construction equipment and trucks. He may perform the duties of a welder in repair of equipment. Performs other related duties.

Milling Machine Operator, Fine Grade

Operates a power-driven milling machine that planes material of the to roadbed and discharges the material into a hauling unit or a windrow. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Mixer Operator

Performs a variety of manual duties, usually working in a utility capacity by working on multiple projects and tasks where demands require workmen with varied experience and ability to work without close direction. Unloads and transports reinforcing steel. May occasionally place and tie reinforcing steel. Directs common laborers in pouring concrete. Erects shoring and bracing. Assists in installation of pipe. Installs, operate and maintains dewatering systems. May assist equipment operators in positioning machines, verifying grades and signaling operators. Directs truck drivers and scraper operators to dumping positions to maintain grades as directed. Uses power tools and air tools. May work as lead man in a labor crew. His performance of a wide variety of construction jobs distinguishes him from a helper assigned to a specific craft. Installs and maintains erosion control. Is more or less a general utility construction worker. May be second step in learning a skill, and may later become a helper in a specific classification. Performs other related duties.

Motor Grader Operator, Rough

Operates a motor grader. Equipment is used to grade excavation and embankment and to lay asphalt , base and other materials. May blade haul roads and do other general motor grader work, but does not perform finish grade work to close specification tolerances. This operator may be a learner in the first phase of learning the skills of motor grader work. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Motor Grader Operator

Operates a motor grader. Equipment is used to grade excavation and embankment and to lay asphalt , base and other materials. May blade haul roads and do other general motor grader work, but does not perform finish grade work to close specification tolerances. This operator may be a learner in the first phase of learning the skills of motor grader work. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Oiler

A learner or semi-skilled worker who under the direction of the watch engineer May oil and grease or otherwise service all engines and necessary equipment as needed. He may clean and paint engine room as needed. Performs other related duties.

Painter, Structures

Paints and stains structural steel and concrete surfaces of bridges, retaining walls, or other structures. Directs cleaning and abrasive blasting of surfaces prior to painting or staining. Performs other related duties.

Pavement Marking Machine Operator

Operates machine used in laying paint stripes or markers on all types of paving. Loads machine with appropriate materials and may walk or ride on machine. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Piledriverman

Sets in place, aligns, plumbs directs driving of timber, concrete, steel, pipe and any other type of piling. Sets, drives and pulls steel, concrete and other types of sheet piling. Rigs pile and leads and bracing. Signals operator. Splices piles before and after driving. Directs pile cutoff. May direct jetting or drilling equipment in connection with installing piles to grade. Performs other related duties.

Pipelayer

Installs concrete, clay, steel, ductile iron, plastic, corrugated pipe and any other type of pipe for storm drainage, water lines, gas lines and sanitary sewer lines. Lays underground communication and electrical ducts. May install and set electrical ground boxes, hand holes, manholes, inlets and other structures. Caulks joints, make threaded and flanged connections. Installs valves and other accessories. Performs other related duties.

Reinforcing Steel Setter, Paving

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Reinforcing Steel Setter, Structure

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Roller Operator, Pneumatic, Self-Propelled

Operates a self-propelled machine with either steel wheels pneumatic tires, which is used to compact and smooth all bituminous materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Roller Operator, Steel Wheel, Flat Wheel/Tamping

Operates a self-propelled machine with either steel wheels or pneumatic tires which is used to compact earth fills, subgrade, flexible base and all other types of materials except bituminous. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Roller Operator, Steel Wheel, Plant Mix Pavement

Operates a self-propelled machine with either steel wheels pneumatic tires, which is used to compact and smooth all bituminous materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Scraper Operator

Operates a self-contained wheeled tractor scraper both self loading or assisted by crawler tractors or other scrapers. Used to excavate and transport earth or other materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Servicer

Drives a truck, which carries various fuels, oils, greases and filters. Must have knowledge of and is responsible for the correct oiling and greasing and changing of filters on equipment according to the manufacturers' specifications. Uses compressed air grease guns, wrenches and other tools. May make adjustments to clutches, brakes and other mechanical items. Keeps record of service preventive maintenance records. May have laborer assisting him. May require CDL if driving truck on public highways. Performs other related duties.

Sign Installer (PGM)

Sets forms, reinforcing steel, anchor bolts and pours concrete for Sign foundations. Fabricates and erects pipe and angle Frameworks by bolting, welding or other means prior to installation of signs that are normally prefabricated. Works from plans in location and drilling holes for proper location and alignment of signs. May direct hoisting of signs into place. Fastens signs to framework by bolting and other means. Locates and sets lighting brackets. May perform other work associated with signing projects. Supervises sign erector helper. Performs other related duties.

Slip Form Machine Operator

Cleans and seals joints requiring a hot or cold sealing compound in concrete paving, sidewalks, driveway and approach slabs. May oil, grease or make necessary repairs adjustments to equipment as needed. Performs other related duties.

Spreader Box operator

Operates spreader box by adjusting hopper and strike off blade so that the gravel, stone or other material may be spread to a specific depth on road surface during seal coat and surface treatment operations. May oil, grease or other wise service and make necessary adjustments to equipment as needed. Performs other related duties.

Structural Steel Worker

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Tractor operator, Crawler Type

Operates a crawler tractor with a bulldozer mounted in front of chassis to level, distribute and push earth or other material. May operate a ripper attachment to break up rock or other hard material. May use a push block on front of tractor to push load scrapers. May oil grease, or otherwise service and make minor repairs to equipment as needed. Performs other related duties.

Tractor Operator, Pneumatic

Operates a gasoline or diesel powered agricultural tractor that tows compaction rollers, plow, disc, water tanks, scrapers and other similar operations. May use other miscellaneous attachments. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Traveling Mixer Operator

Drives a gasoline or diesel truck upon which is mounted a concrete mixer. Operates concrete mixer and dumps concrete on the grade, into forms or into concrete pumps or buckets. Cleans mixer drum. May require CDL license for on highway use. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Truck driver, lowboy-Float

Drives a heavy-duty diesel powered truck to which is attached a trailer upon which heavy equipment is hauled. Driver is often required to operate heavy equipment to load or unload the lowboy. May require CDL license for on highway use. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Truck driver, Single Axle, Heavy

Drive a light capacity truck for transporting loads of construction material. The truck is of single rear axle type, may have various kinds of beds attached, such as dump, flat bed, tank, etc. May require CDL license for driving on highway. May services and make necessary adjustments for proper operation equipment. Performs other related duties.

Truck driver, Single Axle-Light

Drive a light capacity truck for transporting loads of construction material. The truck is of single rear axle type, may have various kinds of beds attached, such as dump, flat bed, tank, etc. May require CDL license for driving on highway. May services and make necessary adjustments for proper operation equipment. Performs other related duties.

Truck Driver, Tandem Axle, Semi-Trailer

Drives a diesel-powered tractor pulling a semi trailer hauling materials. Hauls dirt, rock, aggregates or other material. May require CDL license for driving on highway. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Work Zone Barricade Servicer

Fabricates, erects and maintains temporary traffic control devices, including arrow boards, signs, barricades, channelizing devices, barrels and all message boards. May operates a truck during traffic control operations.

WELDERS - Receives rate for craft being performed to which welding is incidental