



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties Department**



**CAP Solicitation No. 15151DB
Oklahoma Capitol Restoration -
Interior Rehabilitation
State Capitol Building, Oklahoma City
Office of Management and Enterprise
Services**

Construction & Properties Department

Project Manager: David Mihm
Will Rogers Building
2401 N. Lincoln, Suite 106
Oklahoma City, OK. 73105-4402
or
P.O. Box 53448
Oklahoma City, OK. 73152-3448
405-522-4079 Tel.
405-521-3789 Fax
david.mihm@omes.ok.gov

Consultant

Mass Architects, Inc.
Project Manager: Duane Mass
18 W. Park Pl.
Oklahoma City, OK 73103
405-231-1990
duane@massarchitects.com

Design-Build Request for Proposals (RFP), Phase II



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

**Solicitation For
Design-Build Services
(Request for Proposals – Phase II)**

Technical Proposals and Sealed Prices ("Submissions") will be received by the Division of Capital Assets Management, Construction and Properties Department, Will Rogers Building, 2401 Lincoln Blvd, Suite 106, Oklahoma City, OK 73105, or by mail at P.O. Box 53448, Oklahoma City, OK 73152-3448, no more than 96 hours before the time and date indicated below. The Submissions will not be opened nor read aloud publicly.

To have received the Request for Proposals - Phase II Design-Build Solicitation Documents, the Design-Build team must have previously registered with the State of Oklahoma, responded to the design-build Request for Qualifications, and been short-listed per the State approved design-build competitive process. The short-listed design-builders are required to submit these forms as a part of their Submission. Only the short-listed design-build firms are eligible to submit a proposal.

- CAP Solicitation Number: **15151DB**
- Project Name: **Oklahoma Capitol Restoration - Interior Rehabilitation**
- Project Location: **State Capitol Building, Oklahoma City**
- Construction Cost Limitation: **\$91,600,000.00**
- Using Agency: **Office of Management & Enterprise Services**
- RFP Documents Available: **January 5, 2015**

■ **Pre-Proposal Conference:**

Mandatory, Refer to "Instructions To Offerors" in Request for Proposal – Phase II. In case of adverse weather conditions, please call 405-521-2112 prior to Pre-Proposal Conference.

- Date and Time: **January 21, 2015 10:00 A.M.**
- Location: **State Capitol, 2300 N Lincoln Blvd, Room 419C, Oklahoma City, ok**

■ **Submission:**

- Date and Time: **February 6, 2015 at 2:00 P.M.**
- Location: **Will Rogers Building
2401 N Lincoln Blvd, Suite 102/104 OKC, OK 73105**
- Mailing Address: **P.O. Box 53448, OKC, OK 73152-3448
Duane Mass - duane@massarchitects.com
Mike Tower - mike@massarchitects.com
David Mihm - david.mihm@omes.ok.gov**
- Contact Person(s) For Questions:



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Checklist For Offerors

Check your submission documents for each item listed below prior to submitting your Proposals.
Omission of any item could invalidate your submission.

- 1. List your company name, address, telephone number, and Tax ID/FEI number on the Submission forms where indicated.
2. Complete and sign DCAM/CAP Form DB100a Technical Proposal Submission Form and DCAM/CAP Form DB100b Prices Proposal Submission Form and have both notarized where indicated.
3. Fill in all blanks of all forms, including acknowledgment of Addenda. Use words and numbers as identified by each form.
4. Contact David Mihm at the OMES/DCAM/Construction and Properties Department, (405) 522-4079 at least 24 hours in advance of the Submission time to verify that you have received all of the Addenda that have been issued.
5. Double check the completeness of the Technical Proposal Submission Form and Prices Proposal Submission Form to ensure both are correct and contain all required information as requested in the Request for Proposals - Phase II.
6. Include all documentation, certifications, or other special submittals required by the Request for Proposal - Phase II documents.
7. Place the following information on the outside of all sealed packages (tube, box, or envelope) for submitted drawings and paperwork relating to the Technical Proposal:

RFP Phase II, Volume 1 – Technical Proposal

CAP Solicitation Number: 15151DB

CAP Project Name: Oklahoma Capitol Restoration - Interior Rehabilitation

- 8. Place the following information on the outside of the sealed envelope containing the Prices Proposal:

RFP Phase II, Volume 2 – Prices Proposal

CAP Solicitation Number: 15151DB

CAP Project Name: Oklahoma Capitol Restoration - Interior Rehabilitation

DO NOT OPEN

- 9. During inclement weather seasons, contact OMES/DCAM/Construction and Properties front desk at (405) 521-2112 prior to Submission deadline to verify possible time delays or postponements.



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Technical Proposal
Submission Form

To: Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties Department
P. O. Box 53448
Oklahoma City, Oklahoma 73152-3448

From:
(Firm Name)

(Address)

(City/State/Zip)

(Addendum Number(s) Received - insert numbers above)

(Telephone No.)

(EIN/TIN No.)

- 1. The undersigned, being familiar with the local conditions affecting the cost and performance of the work, and with the Contract Documents, including Addendum Number(s) (listed above) on file in the Division of Capital Assets Management, Construction and Properties Department, Will Rogers Building, 2401 N. Lincoln Blvd. Suite 106, Oklahoma City, Oklahoma 73105-4402, and in accordance with the provisions thereof, hereby proposes to affect the enclosed design technical, furnish all labor, materials and equipment necessary, in accordance with these documents for CAP Solicitation Number 15151DB.
2. In submitting the Proposal, it is understood that the right is reserved by the State of Oklahoma to reject any and all submissions, and it is agreed that this submission may not be withdrawn for a period of sixty (60) days after the date of closing of same. Work is to start within ten (10) days after receipt of NOTICE TO PROCEED/WORK ORDER.
3. In submitting a Proposal, the Design-Builder certifies that:
A. They are an Equal Employment Opportunity Employer and that they do not discriminate in any of their business or employment practices.
B. They, and all sub-contractors and suppliers performing work on the Project, will comply with the provisions of the Oklahoma Taxpayer and Citizen Protection Act of 2007.
C. They, and any proposed sub-contractors, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employment Verification Program (E-Verify) available at www.dhs.gov/E-Verify.
D. They will comply with the laws relating to public construction in the State of Oklahoma (O.S. 61; OAC 580:20).
E. They are in compliance with the State of Oklahoma Governor's Executive Order 2012-01, filed February 6, 2012 and effective July 1, 2012, the use of any tobacco product shall be prohibited on any and all properties owned, leased or contracted for use by the State of Oklahoma, including but not limited to all buildings, land and vehicles owned, leased or contracted for use by agencies or instrumentalities of the State of Oklahoma.

STATE OF _____)
) ss _____

(Design-Builder Signature)

COUNTY OF _____)

(Date)

(Design-Builder Title)

This instrument was acknowledged before me on _____ day of _____, 20__

by _____ as _____ of _____
(Design-Builder Printed Name) (Type of Authority) (Design-Builder Organization)

(Signature of notarial officer)

(Seal)

My Commission Expires: _____

My Commission #: _____



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Prices Proposal
Submission Form

To: Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties Department
P. O. Box 53448
Oklahoma City, Oklahoma 73152-3448

From:

(Firm Name)

(Address)

(City/State/Zip)

(Telephone No.)

(EIN/TIN No.)

1. The undersigned, in direct and exclusive connection with submitting the Technical Proposal Submission, hereby proposes to affect the design technical, in accordance with these documents for CAP Solicitation Number 15151DB, for the sums listed.

2. Base Submission Proposal Cost:

A. Scope Development Cost (DCAM/CAP Form DB530 Section 6.1.2):

_____ Dollars
\$ _____ (Numbers)

B. Design Fee:

_____ percent (_____ %)

C. Design-Builder Fee (DCAM/CAP Form DB530 Section 6.2.1):

_____ percent (_____ %)

3. In submitting a Proposal, the Design-Builder certifies to the items contained with Section 3 of the Technical Proposal Submission Form.

STATE OF _____)
_____) ss
COUNTY OF _____)

(Date)

(Design-Builder Signature)

(Design-Builder Title)

This instrument was acknowledged before me on _____ day of _____, 20 _____

by _____ as _____ of _____
(Design-Builder Printed Name) (Type of Authority) (Design-Builder Organization)

(Signature of notarial officer)

(Seal)

My Commission Expires: _____
My Commission #: _____



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

Instructions To Offerors

1.0 DEFINITIONS

1.1 The **Division** is the Construction and Properties Department of the Division of Capital Assets Management within the Office of Management and Enterprise Services.

1.2 **Submission Documents** include the Solicitation for Design-Build Services Notice, these Instructions to Offerors, the submission forms, the betterments and deviations form, other sample contract forms, and the proposed contract documents including any Addenda issued prior to the receipt of Submissions.

1.3 **Addenda** are written or graphic instruments issued by the Using Agency prior to the execution of the contract, which modify or interpret the Submission Documents by additions, deletions, clarifications or corrections.

1.4 A **Submission** is a complete and properly signed proposal to do the work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Submission Documents and Request for Proposal Phase II.

1.5 The **Technical Proposal** may consist of conceptual level presentation drawings, technical approach narratives and/or information regarding quality of materials and systems; refer to requirements of RFP. It must clearly define the proposed project scope and quality levels that the design-builder is offering to Owner in sufficient detail for the Owner and Offeror to mutually understand whether the proposal meets or exceeds the minimum solicitation requirements.

1.6 The **Prices Proposal** may consist of the total pricing and/or fee percentage as well as the contract duration for which the Offeror offers to perform the work described in the Submission Documents. Refer to the RFP for specific requirements

1.7 **Betterments and Deviations.** Betterments are items that are proposed that exceed the minimum performance specifications of the RFP. Deviations are items deemed necessary or might deviate from the performance specifications of the RFP. This form is to be included with the Prices Proposal Submission, if required by the RFP.

1.8 A **Unit Price**, if any, is an amount stated in the Submission as a price per unit of measurement for materials or services as described in the Submission Documents or in the proposed contract documents.

1.9 An **Offeror** is a person or entity that submits the requisite Proposals.

1.10 The **Owner** is the State of Oklahoma represented by the Office of Management and Enterprise Services, Division of Capital Assets Management, Construction and Properties Department.

2.0 PRE-PROPOSAL CONFERENCE

2.1 The Solicitation for Design-Build Services will indicate the date, time and place for a pre-proposal conference if one is to be held.

2.2 The pre-proposal conference is **mandatory**. Each prospective Offeror must be present at the meeting or represented by a full-time company employee or an independent agent authorized to represent the company. Failure to comply will disqualify that Offeror. Attendees are expected to arrive on time and must sign in no later than fifteen minutes after the scheduled meeting time. Exceptions to the sign-in requirement may be granted by the CAP Project Manager for unusual conditions such as adverse weather, complicated directions to site or other unforeseen conditions. The CAP Project Manager has sole discretion in determining exceptions. In adverse weather conditions, contact the Division to verify conference schedule.

2.3 **Verbal communications at any pre-proposal conference are non-binding. All clarifications, revisions or changes to the Submission documents will be included in written addenda and issued to each plan holder registered with the Construction and Properties Division.**

3.0 OFFEROR'S REPRESENTATIONS AND PREQUALIFICATION

3.1 Each Offeror, by making a Submission, represents that:

3.2 The Offeror has read and understands the Submission Documents and the Submission is made in accordance therewith.

3.3 The Offeror has visited the site, is familiar with the local conditions under which the work is to be performed and has correlated observations with the requirements of the proposed contract documents.

3.4 The submitted Submission is based upon the performance specifications required by the Submission Documents without exception.

4.0 SUBMISSION DOCUMENTS

4.1 Copies

4.1.1 Offerors may obtain complete sets of the Submission Documents from the issuing office designated in the Solicitation for Design-Build Services Notice at the stated price, if any.

4.1.2 The Owner, in making copies of the Submission Documents available on the above terms, does so only for the purpose of obtaining Submissions on the work and does not confer a license or grant for any other use.

4.2 Interpretation or correction of Submission Documents:

4.2.1 Offerors shall promptly notify the Using Agency and/or the Division, as directed by the Request for Proposals Phase II documents, of any ambiguity, inconsistency or error which they

may discover upon examination of the Submission Documents or of the site and local conditions.

4.2.2 Any interpretation, correction or change of the Submission Documents will be made by Addendum. Interpretations, corrections or changes of the Submission Documents made in any other manner will not be binding, and Offerors shall not rely upon such interpretations, corrections and changes.

4.3 Addenda

4.3.1 Addenda will be made available electronically to all who are known by the Using Agency to have received a complete set of Submission Documents from the Using Agency.

4.3.2 Copies of the Addenda will be made available for inspection at the Division.

4.3.3 No Addenda will be issued later than seven (7) calendar days prior to the date for receipt of Submissions except an Addendum withdrawing the request for Submissions or one which includes postponement of the date for receipt of Submissions.

4.3.4 Each Offeror shall ascertain prior to submitting his Submission that all Addenda were received, and acknowledge their receipt on Proposal Forms.

5.0 SUBMITTING PROCEDURE

5.1 Form and style of Submission

5.1.1 Submissions shall be submitted on forms supplied with the Submission Documents obtained from the Division.

5.1.2 Offerors shall fill in all blanks on the proposal forms including all Addenda issued, and Unit Prices, if applicable.

5.1.3 Where so indicated by the wording of the proposal forms, sums shall be expressed in both words and figures, and in case of a discrepancy between the two, the amount written in words shall govern.

5.1.4 Interlineation, alteration or erasure of the printed proposal form by the Offeror is not permitted unless required by Addendum or specifications. Any required interlineation, alteration or erasure of entries must be initialed by the signer of the Offeror.

5.1.5 Each copy of the Submission shall include the legal name of the Offeror and be signed by the person legally authorized to bind the Offeror to a contract.

5.2 Submission of Proposals

5.2.1 All of the copies of the Submission and any other documentation required to be submitted with the Submission shall be enclosed in a sealed, opaque envelope, box, or tube. The Submission shall be addressed to and delivered to the Division of Capital Assets Management, Construction and Properties Department, Will Rogers Building, 2401 N. Lincoln Blvd. Suite 106, Oklahoma City, Oklahoma 73105-4402 or mailed to P.O. Box 53448, Oklahoma City, OK. 73152-3448. Place on the outside of the envelope required information as detailed on the Design-Build Checklist.

5.2.2 The Offeror shall assume full responsibility for timely delivery at the location designated for receipt of Submissions.

5.2.3 Submissions received more than ninety-six (96) hours before, excluding weekends and holidays, as well as Submissions received after the deadline for Submissions, will not be considered and will be returned unopened to the Offeror.

5.2.4 Oral, telephonic or telegraphic Submissions are invalid and will not receive consideration.

5.3 Modification, withdrawal or cancellation of Submissions

5.3.1 A Submission may not be modified, withdrawn or canceled by the Offeror after the time and date designated for the receipt of Submissions, and each Offeror so agrees in submitting a Submission.

5.3.2 Withdrawn Submissions may be resubmitted up to the time designated for the receipt of Submissions provided they are in complete conformance with these Instructions to Offerors.

5.3.3 Offerors may withdraw, change and resubmit their Submissions by appearing in person prior to the time set for the closing of the Submission period. Upon presenting proper picture identification, the sealed Submission will be returned to the Offeror. A new or changed sealed Submission will be accepted until the time designated for the closing of the Submission period.

6.0 CONSIDERATION OF SUBMISSIONS

6.1 Submissions will be received for evaluation. The submissions will not be opened publicly.

6.2 Rejection of Submissions

6.2.1 The State has the right to reject any or all Submissions and to reject a Submission not accompanied by the data required by the Submission Documents, or to reject a Submission which is in any way incomplete or irregular.

6.2.2 The State will reject any Submission that is not signed by the authorized representative of the Offeror, and notarized and stamped by a Notary Public.

6.3 Award of contract

6.3.1 It is the intent of the State to award a contract to the Offeror on the basis of evaluation criteria as outlined in the Request for Proposals Phase II, provided the Submission has been submitted in accordance with the requirements of the Submission Documents and does not exceed the funds available. The State shall have the right to waive any informality or irregularity in any Submission or Submissions received and to accept the Submission or Submissions which, in its judgment is in the State's best interest.

6.3.2 The State shall have the right to accept Betterments or Deviations in any order or combination and to determine the best value on the merits of the submission.

6.3.3 Time is of the essence in all State work.

7.0 SURETY BONDS

7.1 Bond requirements

7.1.1 All bonds are for the full value of the contract and shall be issued by a surety company authorized by the Oklahoma Insurance Department to do business in the State of Oklahoma and approved by the Division.

7.1.2 A bond is required for all contracts with a value exceeding Fifty Thousand Dollars (\$50,000.00) that includes coverage for (1) Performance - to insure the completion of the work in accordance with the contract documents in the time stipulated; (2) Defect - to provide for defects in construction or materials for a period of one (1) year from the date of acceptance of the completed work; and (3) Payment - to assure the State is protected from the action of subcontractors, suppliers and employees for unpaid debts of the Design-Builder.

7.1.3 All bonds must be on the forms prescribed and issued by the Division to the successful Offerors with the contract.

7.1.4 Irrevocable Letters of Credit may be used as a substitute for the bonds required in 7.1.2 of these instructions. The letters of credit must be issued by a financial institution insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation on forms obtained from the Division.

8.0 INSURANCE REQUIREMENTS

8.1 The Design-Builder shall carry on his work in accordance with the Worker's Compensation Act (85 O.S., §1 et seq.) of the State of Oklahoma and shall not reject the provisions thereof during the life of the contract. A certificate of coverage must be returned with the contract.

8.2 General and Automobile Liability insurance shall be carried by the Design-Builder during the life of the contract. Certificates of such coverage must be returned with the contract.

8.3 Builder's Risk insurance is required to be provided by the Design-Builder.

9.0 FORM OF CONTRACT AGREEMENT

9.1 A sample of the contract form to be used as the agreement between the State and the successful Offeror is found in the Submission Documents. No substitution, change, alteration or inter-lineation of the form by the Offeror is permitted.

10.0 LABOR

10.1 The Design-Builder shall comply with all State and Federal Laws in the employment and payment of labor.

END OF INSTRUCTIONS TO OFFERORS



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

**General Conditions For
Design-Build Contracts**

The Contract, DCAM/CAP Form DB530, and this document, General Conditions for Design-Build Contracts, DCAM/CAP Form DB535, take precedence over all other Contract Documents including but not limited to the Drawings and Specifications. This Document has important legal consequences. Consultation with an attorney is encouraged.

TABLE OF ARTICLES

1. **General**
2. **Design-Builder's Services and Responsibilities**
3. **Owner's Services and Responsibilities**
4. **Hazardous Conditions and Differing Site Conditions**
5. **Insurance and Bonds**
6. **Payment**
7. **Indemnification**
8. **Time**
9. **Changes to the Contract Price and Time**
10. **Contract Adjustments for Cause**
11. **Stop Work and Termination Clause**
12. **Miscellaneous**

Article 1 - General

1.1 Mutual Obligations

1.1.1 Owner and Design-Builder commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

1.2 Basic Definitions

1.2.1 *Administrator* means the State Construction Administrator of the Construction and Properties Department.

1.2.2 *Agreement* refers to the executed contract between Owner and Design-Builder under the DCAM/CAP Form DB525, *Standard Form of Agreement Between Owner and Design-Builder - Lump Sum* or DCAM/CAP Form DB530, *Standard form of Agreement Between Owner and Design-Builder - Cost Plus Fee with an Option for a Guaranteed Maximum Price*.

1.2.3 *Claim* is a demand or assertion by a party seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Design-Builder arising out of or relating to the Contract. Claims must be made by submitting a DCAM/CAP Form G701DB Change Order.

1.2.4 *Contract* represents the entire and integrated agreement between the parties thereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract shall be amended or modified only by a

Change Order. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Owner or State Agency and a Subcontractor or Sub-subcontractor or (2) between any persons or entities other than the Owner and Design-Builder.

1.2.5 *Contract Documents* consist of DCAM/CAP Form DB525, *Standard Form of Agreement Between Owner and Design-Builder - Lump Sum* or DCAM/CAP Form DB530, *Standard form of Agreement Between Owner and Design-Builder - Cost Plus Fee with an Option for a Guaranteed Maximum Price*, DCAM/CAP Form DB535, *General Conditions For Design-Build Contracts* (herein called the General Conditions of Contract) including Supplementary and other Conditions as executed by Owner and Design-Builder, Design-Build Request for Proposals Phase II including any Addenda issued by Owner, and other documents listed in the Contract (Amendments, Attachments or Modifications) and Change Orders issued after execution of the Contract. A Change Order is a executed modification of the Contract.

1.2.6 *Contract Price* is stated in the Contract and, including authorized adjustments, is the total amount payable by the Owner to the Design-Builder for performance of the Work under the Contract Documents. The Contract Price shall only be changed by Change Order.

1.2.7 *Day or Days* shall mean calendar days.

1.2.8 *Department* means the Construction and Properties Department.

1.2.9 *Design-Builder* is a qualified entity, registered with the Division that proposes to design, with the inclusion of a Design Consultant, and construct the Project governed by the procedures of Title 61 and the Administrative Rules OAC 580:20-19 et. seq. The term "Design-Builder" means the Design-Builder or the Design-Builder's Authorized Representative(s).

1.2.10 *Design Consultant* is a qualified, licensed design professional who is retained by Design-Builder, or employed or retained by anyone under contract with Design-Builder or Subcontractor, to furnish design services required under the Contract Documents.

1.2.11 *Director* means the Director of the Division of Capital Assets Management

1.2.12 *Division* means the Construction and Properties Department of the Division of Capital Assets Management.

1.2.13 *Drawings* are the graphic and pictorial portions of the Contract Documents, showing the design, location and dimensions of the Work, and includes plans, elevations, sections, details, schedules, diagrams and drawing notes.

1.2.14 *Hazardous Conditions* are any materials, wastes, substances and chemicals deemed to be hazardous under applicable Legal Requirements, or the handling, storage, remediation, or disposal of which are regulated by applicable Legal Requirements.

1.2.15 *General Conditions of Contract* refer to this DCAM/CAP Form DB535, *General Conditions for Design-Build Contracts*.

1.2.16 *Legal Requirements* are all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

1.2.17 *Owner* is the State of Oklahoma acting through the Office of Management and Enterprise Services, Division of Capital Assets Management, Construction and Properties Department, acting on behalf of the another State Agency, Commission, Department, or Division and is referred to throughout the contract documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized Representative.

1.2.18 *Owner's Project Criteria* is developed by or for Owner and Using Agency to describe Owner's program requirements and objectives for the Project, including use, space, price, time, site and expandability requirements, as well as submittal requirements and other requirements governing Design-Builder's performance of the Work. Owner's Project Criteria may include conceptual documents, design criteria, performance requirements and other Project-specific technical materials and requirements.

1.2.19 *Project* is the total of design and construction of which the Work performed under the Contract Documents may be the whole or a part and which may include design or construction by the Owner or by separate Contractors.

1.2.20 *Site* is the land or premises on which the Project is located.

1.2.21 *Specifications* are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.

1.2.22 *State Agency* means an agency, board, commission, office, institution, or other governmental body as defined in 61 O.S. Section 202. The Using Agency shall pay all project

related costs including but not limited to work relating to unknown site conditions, remediation of discovered environmental conditions, legal expenses, judgments, and any reasonable project related expense. The term "Using Agency" means the State Agency or the Using Agency's Representative.

1.2.23 *Subcontractor* is any person or entity retained by Design-Builder as an independent contractor to perform a portion of the Work and shall include material, men and suppliers.

1.2.24 *Sub-Subcontractor* is any person or entity retained by a Subcontractor as an independent contractor to perform any portion of a Subcontractor's Work and shall include material, men and suppliers.

1.2.25 *Substantial Completion* is the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete so that Owner can occupy and use for its intended purposes.

1.2.26 *Time* (herein referred to as Contract Time) is the period of time, including authorized adjustments by Change Order or extension of the Contract Time and not inconsistent with the intent of the Contract Documents.

1.2.27 *Work* is comprised of all Design-Builder's design, construction and other services required by the Contract Documents, including procuring and furnishing all materials, equipment, services and labor reasonably inferable from the Contract Documents to fulfill the Design-Builder's obligations. The Work may constitute the whole or a part of the Project.

Article 2 - Design-Builder's Services and Responsibilities

2.1 General Services

2.1.1 Design-Builder's Representative shall be reasonably available to Owner and shall have the necessary expertise and experience required to supervise the Work. Design-Builder's Representative shall communicate regularly with Owner and shall be vested with the authority to act on behalf of Design-Builder. Design-Builder's Representative may be replaced only with the mutual agreement of Owner and Design-Builder.

2.1.2 Design-Builder shall provide Owner with a monthly status report detailing the progress of the Work, including whether (i) the Work is proceeding according to schedule, (ii) discrepancies, conflicts, or ambiguities exist in the Contract Documents that require resolution, (iii) health and safety issues exist in connection with the Work, and/or (iv) other items require resolution so as not to jeopardize Design-Builder's ability to complete the Work for the Contract Price and within the Contract Time(s).

2.1.3 Design-Builder shall prepare and submit, at least three (3) days prior to the meeting contemplated by Section 2.1.4 hereof, a schedule for the execution of the Work for Owner's review and response. The schedule shall indicate the

dates for the start and completion of the various stages of Work, including the dates when Owner information and approvals are required to enable Design-Builder to achieve the Contract Time(s). The schedule shall be revised as required by conditions and progress of the Work, but such revisions shall not relieve Design-Builder of its obligations to complete the Work within the Contract Time(s), as such dates may be adjusted in accordance with the Contract Documents. Owner's review of and response to the schedule shall not be construed as relieving Design-Builder of its complete and exclusive control over the design and construction means, methods, sequences and techniques for executing and coordinating all portions of the Work.

2.1.4 The parties will meet within ten (10) days after execution of the Agreement to discuss issues affecting the administration of the Work and to implement the necessary procedures, including those relating to submittals and payment, to facilitate the ability of the parties to perform their obligations under the Contract Documents.

2.2 Design Professional Services

2.2.1 Design-Builder shall, consistent with applicable state licensing laws, provide through qualified, licensed design professionals employed by Design-Builder, or procured from qualified, independent licensed Design Consultants, the necessary design services, including architectural, engineering and other design professional services, for the preparation of the required drawings, specifications and other design submittals to permit Design-Builder to complete the Work consistent with the Contract Documents. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner or Using Agency and any Design Consultant.

2.3 Standard of Care for Design Professional Services

2.3.1 The standard of care for all design professional services performed to execute the Work shall be the care and skill ordinarily used by members of the design profession practicing under similar conditions at the same time and locality of the Project. Notwithstanding the preceding sentence, if the parties agree upon specific performance standards for any aspect of the Work, which standards are to be set forth in an exhibit to the Agreement entitled "Performance Standard Requirements," the design professional services shall be performed to achieve such standards.

2.4 Design Development Services

2.4.1 Design-Builder and Owner shall, consistent with any applicable provision of the Contract Documents, agree upon any interim design submissions that Owner may wish to review, which interim design submissions may include design criteria, drawings, diagrams and specifications setting forth the Project requirements. On or about the time of the scheduled submissions, Design-Builder and Owner shall meet and confer about the submissions, with Design-Builder identifying during

such meetings, among other things, the evolution of the design and any significant changes or deviations from the Contract Documents, or, if applicable, previously submitted design submissions. Minutes of the meetings will be maintained by Design-Builder and provided to all attendees for review within five (5) days. Following the design review meeting, Owner shall review and approve the interim design submissions in a time that is consistent with the turnaround times set forth in Design-Builder's schedule.

2.4.2 Design-Builder shall submit to Owner Construction Documents setting forth in detail drawings and specifications describing the requirements for construction of the Work. The Construction Documents shall be consistent with the latest set of interim design submissions; as such submissions may have been modified in a design review meeting. The parties shall have a design review meeting to discuss, and Owner shall review and approve, the Construction Documents in accordance with the procedures set forth Section 2.4.1 above. Design-Builder shall proceed with construction in accordance with the approved Construction Documents and shall submit the required number of sets as required by the Request for Proposal Phase II, including originals and electronic version of approved Construction Documents to Owner prior to commencement of construction.

2.4.3 Owner's review and approval of interim design submissions and the Construction Documents is for the purpose of mutually establishing a conformed set of Contract Documents compatible with the requirements of the Work. Neither Owner's review nor approval of any interim design submissions and Construction Documents shall be deemed to transfer any design liability from Design-Builder to Owner.

2.4.4 To the extent not prohibited by the Contract Documents or Legal Requirements, Design-Builder may prepare interim design submissions and Construction Documents for a portion of the Work to permit construction to proceed on that portion of the Work prior to completion of the Construction Documents for the entire Work.

2.5 Legal Requirements

2.5.1 Design-Builder shall perform the Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.

2.5.2 The Contract Price and/or Contract Time(s) shall be adjusted to compensate Design-Builder for the effects of any changes in the Legal Requirements enacted after the date of the Agreement affecting the performance of the Work or if a Guaranteed Maximum Price is established after the date of the Agreement, the date the parties agree upon the Guaranteed Maximum Price. Such effects may include, without limitation, revisions Design-Builder is required to make to the Construction Documents because of changes in Legal Requirements.

2.5.3 The Design-Builder shall be responsible to the Owner for acts and omissions of the Contractor's employees,

Subcontractors and their agents and employees, and other persons performing portions of the Work under a contract with the Design-Builder.

2.5.4 By appropriate agreement, written where legally required for validity, the Design-Builder shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Design-Builder by terms of the Contract Documents, and to assume toward the Design-Builder all the obligations and responsibilities which the Design-Builder, by these Documents, assumes toward the Owner. Each subcontract agreement shall preserve and protect the rights of the Owner and Consultant under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Design-Builder that the Design-Builder, by the Contract Documents, has against the Owner. Where appropriate, the Design-Builder shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Design-Builder shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

2.5.5 Each subcontract agreement for a portion of the Work is assigned by the Design-Builder to the Owner provided that:

.1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Paragraph 11.2 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and

.2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

2.5.6 If the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted.

2.6 Approvals, Permits and Taxes

2.6.1 Design-Builder shall obtain and pay for all necessary permits, approvals, licenses, State inspection fees, royalties and license fees required for the proper execution and completion of the Work by any State or quasi-State entity having jurisdiction over the Project. Building permits from local municipalities are not required for Work on State owned lands except where permits are required for connection to utilities owned by the local municipality.

2.6.2 Design-Builder shall pay sales, consumer, use and similar taxes for the Work of portions thereof provided by the Design-Builder which are legally enacted when Contract was executed, whether or not yet effective or merely scheduled to go into effect. The State of Oklahoma is **not** sales tax exempt; hence this Project is **not** sales tax exempt.

2.7 Design-Builder's Construction Phase Services

2.7.1 Unless otherwise provided in the Contract Documents to be the responsibility of Owner or a separate contractor, Design-Builder shall provide and pay for, through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Design-Builder to properly execute and complete construction of the Project consistent with the Contract Documents.

2.7.2 Design-Builder shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. Design-Builder shall at all times exercise complete and exclusive control over the design and construction means, methods, sequences and techniques of construction.

2.7.3 Design-Builder shall employ only Subcontractors who are duly licensed and qualified to perform the Work consistent with the Contract Documents, and shall furnish in writing to the Owner the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. Owner may reasonably object to Design-Builder's selection of any Subcontractor, provided that the Contract Price and/or Contract Time(s) shall be adjusted to the extent that Owner's decision impacts Design-Builder's cost and/or time of performance. The Design-Builder shall not contract with a proposed Subcontractor, person or entity to whom the Owner has made reasonable and timely objection. The Design-Builder shall not be required to contract with anyone to whom the Design-Builder has made reasonable objection. The Design-Builder shall not change a Subcontractor, person or entity previously selected if the Owner makes reasonable objection to such change.

2.7.4 Design-Builder assumes responsibility to Owner for the proper performance of the Work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner or Using Agency and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

2.7.5 Design-Builder shall coordinate the activities of all Subcontractors. If Owner performs other work on the Project or at the Site with separate contractors under Owner's control, Design-Builder agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

2.7.6 Design-Builder shall keep the Site reasonably free from debris, trash and construction wastes to permit Design-Builder to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, Design-Builder shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit Owner to occupy the Project or a portion of the Project for its intended use.

.1 If the Design-Builder fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Design-Builder.

2.7.7 The Design-Builder shall provide the Owner and Using Agency access to the Work in preparation and progress wherever located.

2.8 Design-Builder's Responsibility for Project Safety

2.8.1 Design-Builder recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to (i) all individuals at the Site, whether working or visiting, (ii) the Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site, and (iii) all other property at the Site or adjacent thereto. Design-Builder assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work. Design-Builder shall, prior to commencing construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents, Design-Builder's Safety Representative shall be an individual stationed at the Site who may have responsibilities on the Project in addition to safety. The Safety Representative shall make routine daily inspections of the Site and shall hold weekly safety meetings with Design-Builder's personnel, Subcontractors and others as applicable.

2.8.2 Design-Builder and Subcontractors shall comply with all Legal Requirements relating to safety, as well as any Owner-specific safety requirements set forth in the Contract Documents, provided that such Owner-specific requirements do not violate any applicable Legal Requirement. Design-Builder will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to Owner's Representative and, to the extent mandated by Legal Requirements, to all State or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

2.8.3 Design-Builder's responsibility for safety under this Section 2.8 is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related

to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

2.9 Design-Builder's Warranty

2.9.1 Design-Builder warrants to Owner that the construction, including all materials and equipment furnished as part of the construction, shall be new unless otherwise specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in materials and workmanship. Design-Builder's warranty obligation excludes defects caused by abuse, alterations, or failure to maintain the Work by persons other than Design-Builder or anyone for whose acts Design-Builder may be liable. Nothing in this warranty is intended to limit any manufacturer's warranty which provides Owner with greater warranty rights than set forth in this Section 2.9 or the Contract Documents. Design-Builder will provide Owner with all manufacturers' warranties upon Substantial Completion. If requested by the Owner, Design-Builder shall furnish evidence as to the kind and quality of materials and equipment.

2.10 Correction of Defective Work

2.10.1 Design-Builder agrees to correct any Work that is rejected by the Owner or found to not be in conformance with the Contract Documents, including that part of the Work subject to Section 2.9 hereof, within a period of one year from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by the Contract Documents. If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Owner, be uncovered for the Owner's inspection and be replaced at the Contractor's expense without change to the Contract Time.

2.10.2 Design-Builder shall, within seven (7) days of receipt of written notice from Owner that the Work is rejected by the Owner or found to not be in conformance with the Contract Documents, take meaningful steps to commence correction of such Work, including the correction, removal or replacement of said Work and any damage caused to other parts of the Work affected by said Work. If Design-Builder fails to commence the necessary steps within such seven (7) day period, Owner, in addition to any other remedies provided under the Contract Documents, may provide Design-Builder with written notice that Owner will commence correction of such nonconforming Work with its own forces. If Owner does perform such corrective Work, Design-Builder shall be responsible for all reasonable costs incurred by Owner in performing such correction. If the nonconforming Work creates an emergency requiring an immediate response, the seven (7) day periods identified herein shall be deemed inapplicable.

2.10.3 Nothing contained in Paragraphs 2.10 shall be construed to establish a period of limitation with respect to other obligations which the Design-Builder might have under

the Contract Documents. The one year period referenced in Section 2.10.1 above applies only to Design-Builder's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies Owner may have regarding Design-Builder's other obligations under the Contract Documents.

2.10.4 If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Subparagraph 6.6.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Design-Builder shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Design-Builder a written acceptance of such condition. This period of one year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation under this Subparagraph 2.10.4 shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

2.10.5 The Design-Builder shall bear the cost of correcting destroyed or damaged construction of the Owner or separate Contractors, whether completed or partially completed, caused by the Design-Builder's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

2.11 Documents and Samples

2.11.1 Design-Builder shall maintain at the site for the Owner one record copy of the Drawings, Specifications, Change Orders and other Contract Documents, in good order and marked currently to record changes and selections made during construction and, in addition, approved Samples and similar required submittals. These shall be delivered to the Owner upon completion of the Work.

2.11.2 Additionally, the Design Builder shall maintain at the site the Drawings that have been stamped and approved by the State Fire Marshal and/or any governmental or quasi-governmental entities. The State Fire Marshal approved set is only for use by the State Fire Marshal's office.

2.11.3 Samples and similar submittals are not Contract Documents. The purpose of the submittal is to demonstrate, for the portions of the Work for which submittals are required, the way the Design-Builder proposes to conform to the information given and the design concept expressed in the Contract Documents.

2.12 Design-Builder's Responsibility for Property

2.12.1 Design-Builder shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage to (i) the Work and materials and equipment to be

incorporated therein, whether in storage on or off the site, under care, custody or control of the Design-Builder or the Design-Builder's Subcontractors or Sub-subcontractors; and (ii) other property at the site or adjacent thereto, such as, but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

2.12.2 Design-Builder shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

2.12.3 Design-Builder shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Clause 2.12.1 caused in whole or in part by the Design-Builder, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Design-Builder is responsible under Clause 2.12.1, except damage or loss attributable to acts or omissions of the Owner or anyone directly or indirectly employed by them, or by anyone for whose acts Owner may be liable, and not attributable to the fault or negligence of the Design-Builder. The foregoing obligations of the Design-Builder are in addition to the Design-Builder's obligations under Article 7.

Article 3 - Owner's Services and Responsibilities

3.1 Duty to Cooperate

3.1.1 Owner shall, throughout the performance of the Work, cooperate with Design-Builder and perform its responsibilities, obligations and services in a timely manner to facilitate Design-Builder's timely and efficient performance of the Work and so as not to delay or interfere with Design-Builder's performance of its obligations under the Contract Documents.

3.1.2 Owner shall provide timely reviews and approvals of interim design submissions and Construction Documents consistent with the mutually approved turnaround times set forth in Design-Builder's schedule.

3.2 Furnishing of Services and Information

3.2.1 Unless expressly stated to the contrary in the Contract Documents, Owner shall provide, at its own cost and expense, for Design-Builder's information and use the following, of which Design-Builder may rely upon in performing the Work:

.1 Surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;

.2 Geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the Site;

.3 Temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the Project and enable Design-Builder to perform the Work;

.4 A legal description of the Site;

.5 To the extent available, as-built and record drawings of any existing structures at the Site; and

.6 To the extent available, environmental studies, reports and impact statements describing the environmental conditions, including Hazardous Conditions, in existence at the Site.

If Design-Builder discovers that actual conditions are in variance with the information provided by Owner, Design-Builder shall promptly notify Owner of such variance in writing.

3.2.2 Owner is responsible for securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable Design-Builder to perform the Work. Owner is further responsible for all costs, including attorneys' fees, incurred in securing these necessary agreements.

3.3 Financial Information

3.3.1 At Design-Builder's request, Owner shall promptly furnish reasonable evidence that Owner has adequate funds available and committed to fulfill all of Owner's contractual obligations under the Contract Documents. If Owner fails to furnish such financial information in a timely manner, Design-Builder may stop Work under Section 11.3 hereof or exercise any other right permitted under the Contract Documents.

3.3.2 Design-Builder shall cooperate with the reasonable requirements of Owner's lenders or other financial sources. Notwithstanding the preceding sentence, after execution of the Agreement Design-Builder shall have no obligation to execute for Owner or Owner's lenders or other financial sources any documents or agreements that require Design-Builder to assume obligations or responsibilities greater than those existing obligations Design-Builder has under the Contract Documents.

3.4 Owner's and Using Agency's Representatives

3.4.1 Using Agency's Representative shall be responsible for providing State Agency-supplied information and approvals in a timely manner to permit Design-Builder to fulfill its obligations under the Contract Documents.

3.4.2 Owner's Representative shall provide Design-Builder with prompt notice if it observes any failure on the part of Design-Builder to fulfill its contractual obligations, including any errors, omissions or defects in the performance of the Work.

3.5 Acceptance of Non-conforming Work

3.5.1 If the Owner prefers to accept Work which is not in conformance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

3.6 Owner's Separate Contractors

3.6.1 Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under General Conditions identical or substantially similar to these. If the Design-Builder claims that delay or additional cost is involved because of such action by the Owner, the Design-Builder shall make such Claim as provided elsewhere in the Contract Documents

.1 When separate contracts are awarded by the Owner for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner- Contractor Contract, and not the Design-Builder.

3.6.2 Owner is responsible for all work performed on the Project or at the Site by separate contractors under Owner's control with exception to Paragraph 2.10.5. Owner shall contractually require its separate contractors to cooperate with, and coordinate their activities so as not to interfere with, Design-Builder in order to enable Design-Builder to timely complete the Work consistent with the Contract Documents.

3.7 Right to Approve Applications for Payment

3.7.1 The Owner shall have the right to review, evaluate and approve or reject Applications for Payment and Certificates for Payment of the Design-Builder.

Article 4 - Hazardous Conditions and Differing Site Conditions

4.1 Hazardous Conditions

4.1.1 Unless otherwise expressly provided in the Contract Documents to be part of the Work, Design-Builder is not responsible for any Hazardous Conditions encountered at the Site. Upon encountering any Hazardous Conditions, Design-Builder will stop Work immediately in the affected area and duly notify Owner and, if required by Legal Requirements, all State or quasi-government entities with jurisdiction over the Project or Site.

4.1.2 Upon receiving notice of the presence of suspected Hazardous Conditions, Owner shall take the necessary

measures required to ensure that the Hazardous Conditions are remediated or rendered harmless.

4.1.3 Design-Builder shall be obligated to resume Work at the affected area of the Project only after Owner's expert provides it with written certification that (i) the Hazardous Conditions have been removed or rendered harmless and (ii) all necessary approvals have been obtained from all State and quasi-government entities having jurisdiction over the Project or Site.

4.1.4 Design-Builder will be entitled, in accordance with these General Conditions of Contract, to an adjustment in its Contract Price and/or Contract Time(s) to the extent Design-Builder's cost and/or time of performance have been adversely impacted by the presence of Hazardous Conditions.

4.1.5 Notwithstanding the preceding provisions of this Section 4.1, Owner is not responsible for Hazardous Conditions introduced to the Site by Design-Builder, Subcontractors or anyone for whose acts they may be liable. Design-Builder shall indemnify, defend and hold harmless Owner and Owner's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those Hazardous Conditions introduced to the Site by Design-Builder, Subcontractors or anyone for whose acts they may be liable.

4.2 Differing Site Conditions

4.2.1 Concealed or latent physical conditions or subsurface conditions at the Site that materially differ from the conditions indicated in the Contract Documents are referred to herein as "Differing Site Conditions." If Design-Builder encounters a Differing Site Condition, Design-Builder will be entitled to an adjustment in the Contract Price and/or Contract Time(s) to the extent Design-Builder's cost and/or time of performance are adversely impacted by the Differing Site Condition.

4.2.2 Upon encountering a Differing Site Condition, Design-Builder shall provide prompt written notice to Owner of such condition, which notice shall not be later than seven (7) days after such condition has been first encountered. Design-Builder shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered. The failure by the Design-Builder to give such written notice of the discovered Differing Site Condition prior to executing any additional work or within the seven (7) days shall constitute a waiver of any claim for additional compensation or time extension. Any change in the Contract Price or Contract Time shall be made by the execution of a Change Order as determined by Articles 9 and 10.

Article 5 - Insurance and Bonds

5.1 Design-Builder's Insurance Requirements

5.1.1 The Design-Builder shall purchase from and maintain in a company or companies lawfully authorized to do business in the State of Oklahoma such insurance as will protect the Design-Builder from claims set forth below which may arise out of or result from the Design-Builder's operations under the Contract and for which the Design-Builder may be legally liable, whether such operations be by the Design-Builder or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 claims under workmen's compensation;
- .2 claims involving employer's liability;
- .3 claims involving commercial general liability;
- .4 claims involving automobile liability;
- .5 claims involving builders risk; and
- .6 professional liability insurance.

5.1.2 The insurance required by Subparagraph 5.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverage, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.

5.1.3 Certificates of Insurance acceptable to the Owner shall be filed with the Owner with the executed Contract. These Certificates and the insurance policies required by this Paragraph 5.1 shall contain a provision that coverage afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner.

5.1.4 Design-Builder's liability insurance required by Section 5.1.1 above shall be written for the coverage amounts set forth in the Agreement and shall include completed operations insurance for the period of time set forth in the Agreement.

5.1.5 Design-Builder's liability insurance set forth in Sections 5.1.1.1 through 5.1.1.4 above shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project.

5.1.6 To the extent Owner requires Design-Builder or any Design Consultant to provide professional liability insurance for claims arising from the negligent performance of design services by Design-Builder or the Design Consultant, the coverage limits, duration and other specifics of such insurance shall be as set forth in the Agreement. Any professional liability shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project. Such policies shall be provided prior to the commencement of any design services hereunder.

5.1.7 Prior to commencing any construction services hereunder, Design-Builder shall provide Owner with certificates

evidencing that (i) all insurance obligations required by the Contract Documents are in full force and in effect and will remain in effect for the duration required by the Contract Documents and (ii) no insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to Owner.

5.2 Bonds and Other Performance Security

5.4.1 The Owner requires Design-Builder to obtain Performance Bond, Payment Bond, and Statutory Defect Bond as set forth in the Agreement.

Article 6 - Payment

6.1 Schedule of Values

6.1.1 Within thirty (30) days of execution of the Agreement, Design-Builder shall submit for Owner's review and approval a schedule of values for all of the Work. The Schedule of Values will (i) subdivide the Work into its respective parts; (ii) include values for all items comprising the Work and (iii) serve as the basis for monthly progress payments made to Design-Builder throughout the Work.

6.2 Monthly Progress Payments

6.2.1 On or before the date established in the Agreement, Design-Builder shall submit for Owner's review and approval its Application for Payment on DCAM/CAP Form G702/G703, with the required number of copies as established on DCAM/CAP Form 140-DB *Application Checklist*, requesting payment for all Work performed as of the date of the Application for Payment. The Application for Payment shall be accompanied by all supporting documentation required by the Contract Documents.

6.2.2 The Application for Payment may request payment for equipment and materials not yet incorporated into the Project, provided that (i) Owner is satisfied that the equipment and materials are suitably stored at either the Site or another acceptable location, (ii) the equipment and materials are protected by suitable bonds and insurance as required by the Contract Documents and (iii) upon payment, Owner will receive the equipment and materials free and clear of all liens and encumbrances. All stored materials shall be protected from weather and stored according to the manufacturers written instructions. The Owner will not pay for stored materials that are damaged. Payment requests for materials stored off-site shall be accompanied by and comply with DCAM/CAP Form G150-DB *Affidavit As To OffSite Stored Materials*.

6.2.3 The Application for Payment shall constitute Design-Builder's representation that the Work has been performed consistent with the Contract Documents, has progressed to the point indicated in the Application for Payment, and that title to all Work will pass to Owner free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the Work into the Project, or upon Design-Builder's receipt of payment, whichever occurs earlier.

6.2.4 If the Owner finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Owner shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Owner may retain a percentage of payment up to the maximum amount authorized by the Fair Pay for Construction Act, until satisfactory progress is achieved. The Design-Builder shall not withhold retainage from subcontractors and/or material suppliers unless the Owner withholds retainage from the Design-Builder; retainage withheld by Design-Builder from subcontractors and/or material suppliers must be the same percentage of that withheld by the Owner and only for the portion of the Work affected.

6.2.5 Such applications shall not include requests for payment of amounts the Design-Builder does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason.

6.3 Withholding of Payments

6.3.1 On or before the date established in the Agreement, Owner shall pay Design-Builder all amounts properly due. If Owner determines that Design-Builder is not entitled to all or part of an Application for Payment, it will notify Design-Builder in writing within fourteen (14) days of receipt of the invoice in accordance with the Fair Pay for Construction Act, Title 61, Section 221 et. seq.

6.3.2 The Owner may decide to withhold payment in whole or in part, to the extent reasonably necessary to protect the interests of the State of Oklahoma from loss because of:

- .1 defective or non-conforming Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims;
- .3 failure of the Design-Builder to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- .5 damage to the Owner or another contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 persistent failure to carry out the Work in accordance with the Contract Documents.

6.3.3 Notwithstanding anything to the contrary in the Contract Documents, Owner shall pay Design-Builder all undisputed amounts in an Application for Payment within the times required by the Agreement.

6.3.4 Applications for Payment shall be discontinued after the Contract Time, including approved Change Orders, has been exceeded. No additional progress payments will be made until Substantial Completion of the Work has been established.

6.3.5 The following actions: a Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner or Using Agency, shall not constitute acceptance of Work not in accordance with the Contract Documents.

6.4 Right to Stop Work and Interest

6.4.1 If Owner fails to pay Design-Builder any undistributed amount that becomes due, Design-Builder, in addition to all other remedies provided in the Contract Documents, may stop Work pursuant to Section 11.3 hereof. All payments due and unpaid shall bear interest at the rate set forth in the Fair Pay Act for Construction Act.

6.5 Design-Builder's Payment Obligations

6.5.1 Design-Builder will pay Design Consultants and Subcontractors, in accordance with its contractual obligations to such parties, all the amounts Design-Builder has received from Owner on account of their work. Design-Builder will impose similar requirements on Design Consultants and Subcontractors to pay those parties with whom they have contracted. Design-Builder will indemnify and defend Owner against any claims for payment and liens as set forth in Section 7.3 hereof.

6.5.2 Neither the Owner nor the Using Agency shall have an obligation to pay or cause payment of money to be paid to a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them except as may be otherwise required by law.

6.5.3 Payments to material suppliers shall be treated in a similar manner to that provided in Paragraphs 6.5.1 and 6.5.2.

6.6 Substantial Completion

6.6.1 Design-Builder shall notify Owner in writing and include a comprehensive list of items, herein referred to as "Punch List," to be completed or corrected when it believes the Work, or to the extent permitted in the Contract Documents, a portion of the Work, is substantially complete. The Design-Builder shall proceed promptly to complete and correct the items of the Punch List. Within five (5) days of Owner's receipt of Design-Builder's Substantial Completion notice, Owner, Using Agency and Design-Builder will inspect such Work. If such Work is substantially complete, Owner shall prepare and issue a Certificate of Substantial Completion that will set forth (i) the date of Substantial Completion of the Work or portion thereof, (ii) the remaining items of Work that have to be completed before final payment, (iii) provisions (to the extent not already provided in the Contract Documents) establishing Owner's and Design-Builder's responsibility for the Project's

security, maintenance, utilities and insurance pending final payment and (iv) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion. If the Owner and Using Agency inspection discloses any item whether or not included on the Design-Builder's Punch List, which is not in accordance with the requirements of the Contract Documents, the Design-Builder shall, before issuance of the Certificate of Substantial Completion, incorporate them into the Punch List and complete or correct such additional items. The Design-Builder shall then submit a request for another inspection to the Owner until such time that the Owner accepts the Work as Substantially Complete.

6.6.2 No later than twenty-one (21) days after the Certificate of Substantial Completion is issued for the Project or separate usable phases of the Project and upon adequate performance of the Design-Builder and with approval of any applicable surety, retainage shall be released by the Owner to the Design-Builder less an amount no greater than one hundred and fifty percent (150%) of the established costs to correct any incomplete or defective Work as identified, itemized, and attached to the Certificate of Substantial Completion. All remaining funds shall be released as each deficiency is satisfactorily completed. The Design-Builder shall release within ten (10) days of receipt, the share of those funds that have been withheld from other entities. All other entities shall release within seven (7) days of receipt, the share of those funds that have been withheld from other entities.

6.6.3 Owner, at its option, may use a portion of the Work which has been determined to be substantially complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items set forth in Section 6.6.1 above, (ii) Design-Builder and Owner have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate State authorities having jurisdiction over the Project, and (iii) Owner and Design-Builder agree that Owner's use or occupancy will not interfere with Design-Builder's completion of the remaining Work.

6.7 Final Payment

6.7.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and after receipt of a Final Application for Payment from Design-Builder, Owner and Using Agency will promptly make such inspection and, when the Owner finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner will complete page two (2) of DCAM/CAP Form A106-DB, *Certificate of Contract Completion*. Subsequently, the Owner shall make final payment by the time required in the Agreement, provided that Design-Builder has completed all of the Work in conformance with the Contract Documents.

6.7.2 At the time of submission of its Final Application for Payment, Design-Builder shall provide the following:

- .1 an affidavit that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which will in any way affect Owner's interests;
- .2 a general release executed by Design-Builder waiving, upon receipt of final payment by Design-Builder, all claims, except those claims previously made in writing to Owner and remaining unsettled at the time of final payment;
- .3 consent of Design-Builder's surety, if any, to final payment;
- .4 All operating manuals, warranties and other deliverables required by the Contract Documents; and
- .5 certificates of insurance confirming that required coverages will remain in effect consistent with the requirements of the Contract Documents.

Article 7 - Indemnification

7.1 Patent and Copyright Infringement

7.1.1 Upon approval of the Oklahoma Attorney General, Design-Builder shall defend any action or proceeding brought against Owner based on any claim that the Work, or any part thereof, or the operation or use of the Work or any part thereof, constitutes infringement of any United States patent or copyright, now or hereafter issued. Owner shall give prompt written notice to Design-Builder of any such action or proceeding and will reasonably provide authority, information and assistance in the defense of same. Design-Builder shall indemnify and hold harmless Owner, agents and employees of any of them from and against all claims, damages, losses and costs, including but not limited to attorneys' fees and expenses awarded against Owner or Design-Builder in any such action or proceeding. Design-Builder agrees to keep the Oklahoma Attorney General and Owner informed of all developments in the defense of such actions.

7.1.2 If Owner is enjoined from the operation or use of the Work, or any part thereof, as the result of any patent or copyright suit, claim, or proceeding, Design-Builder shall at its sole expense take reasonable steps to procure the right to operate or use the Work. If Design-Builder cannot so procure such right within a reasonable time, Design-Builder shall promptly, at Design-Builder's option and at Design-Builder's expense and Owner's written approval, (i) modify the Work so as to avoid infringement of any such patent or copyright or (ii) replace said Work with Work that does not infringe or violate any such patent or copyright.

7.1.3 Sections 7.1.1 and 7.1.2 above shall not be applicable to any suit, claim or proceeding based on infringement or violation of a patent or copyright arising from modifications to the Work by Owner or its agents after acceptance of the Work. If the suit, claim or proceeding is based upon events set forth

in the preceding sentence, Owner shall be responsible for the acts or omissions of its officers and employees.

7.1.4 The obligations set forth in this Section 7.1 shall constitute the sole agreement between the parties relating to liability for infringement of violation of any patent or copyright.

7.2 Reserved

7.3 Payment Claim Indemnification

7.3.1 Providing that Owner is not in breach of its contractual obligation to make payments to Design-Builder for the Work, Design-Builder shall indemnify, defend and hold harmless Owner from any claims brought against Owner or against the Project as a result of the failure of Design-Builder, or those for whose acts it is responsible, to pay for any services, materials, labor, equipment, taxes or other items or obligations furnished or incurred for or in connection with the Work. Within three (3) days of receiving written notice from Owner that such a claim has been filed, Design-Builder shall commence to take the steps necessary to resolve said claim.

7.4 Design-Builder's General Indemnification

7.4.1 Design-Builder shall indemnify, hold harmless and defend Owner, its officers, directors, employees and agents from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction (other than to the Work itself) to the extent resulting from the negligent acts or omissions of Design-Builder, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable.

7.4.2 If an employee of Design-Builder, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable has a claim against Owner, its officers, directors, employees, or agents, Design-Builder's indemnity obligation set forth in Section 7.4.1 above shall not be limited by any limitation on the amount of damages, compensation or benefits payable by or for Design-Builder, Design Consultants, Subcontractors, or other entity under any employee benefit acts, including workers' compensation or disability acts.

Article 8 - Time

8.1 Obligation to Achieve the Contract Times

8.1.1 Design-Builder agrees that it will commence performance of the Work and achieve the Contract Time(s) in accordance with Article 5 of the Agreement. The date of commencement of the Work is the date established in the Notice to Proceed/Work Order.

8.2 Delays to the Work

8.2.1 If Design-Builder is delayed in the performance of the Work due to acts, omissions, conditions, events, or

circumstances beyond its control and due to no fault of its own or those for whom Design-Builder is responsible, the Contract Time(s) for performance shall be reasonably extended by execution of a Change Order. If the Design-Builder wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Design-Builder's Claim shall include a description of the probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

8.2.2 The Contract construction time was determined by the estimated construction time with additional time added for project days lost due to typical adverse weather conditions in the project vicinity. Consideration was given to the projected starting date and an anticipated schedule of work. Adverse weather conditions include abnormal precipitation, temperature and wind conditions. Claims for additional time may be made when the actual weather conditions at the project site cause delay days which exceed the days indicated on the following chart:

Month	Work days lost included in Contract Time					
	OKC	Tulsa	NW	NE	SE	SW
January	8	9	10	8	8	7
February	8	8	10	8	8	8
March	5	6	8	6	6	6
April	5	6	5	5	6	5
May	3	3	1	2	3	2
June	3	3	1	2	2	1
July	1	1	1	1	1	1
August	1	1	1	1	1	1
September	1	1	1	1	1	1
October	2	3	1	2	1	2
November	3	2	2	2	2	2
December	4	4	4	4	4	4
Totals	44	47	45	42	43	40

8.2.3 All claims for additional days that exceed the work days lost as indicated on the chart, shall be submitted with documentation from a recognized climatological source such as the Oklahoma Climatological Survey (www.mesonet.net). Other sources must be submitted to the Owner for approval.

8.2.4 All claims for additional time due to adverse weather conditions that exceed the days indicated on the chart, shall be submitted with the next monthly payment application.

8.2.5 Weather conditions and lost work days shall be recorded daily by the Design-Builder and submitted to the Owner with the monthly payment applications.

8.2.6 Unused lost weather days, as indicated in paragraph 8.8.2, included in the Contract time shall be used by the Owner to offset lost time for other approved delay claims.

8.2.7 An extension of the Contract Time is the sole and exclusive remedy available to the Design-Builder, in the event of delays described in Article 8. In no event, and under no circumstances, shall the Contract Sum be increased, nor shall the Design-Builder claim, recover or receive payment for any delay to the Project, whether or not such delayed event is in the critical path of the construction schedule.

Article 9 - Changes to the Contract Price and Time

9.1 Change Orders

9.1.1 A Change Order, DCAM/CAP Form G701DB is a written instrument, prepared and signed by the Design-Builder, approved and signed by Owner, which amends the original Agreement between Owner and Design-Builder, stating their agreement upon all of the following:

- .1 a change in the Work; and/or
- .2 the amount of the adjustment to the Contract Price; and/or
- .3 the extent of the adjustment to the Contract Time(s).

9.1.2 The Design-Builder must also include a cost breakdown page from DCAM/CAP Form G701DB for each Subcontractor.

9.1.3 All changes in the Work authorized by applicable Change Order shall be performed under the applicable conditions of the Contract Documents. Owner and Design-Builder shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for such changes.

9.2 Reserved

9.3 Minor Changes in the Work

9.3.1 Minor changes in the Work do not involve an adjustment in the Contract Price and/or Contract Time(s) and do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Design-Builder and/or Owner may make minor changes in the Work consistent with the intent of the Contract Documents, provided, however that Design-Builder shall promptly inform Owner, in writing and prior to implementing, of any such changes and record such changes on the documents maintained by Design-Builder if so accepted by Owner.

9.4 Contract Price Adjustments

9.4.1 The increase or decrease in Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:

- .1 Unit prices set forth in the Agreement or as subsequently agreed to between the parties;
- .2 A mutually accepted, lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by Owner;
- .3 Costs, fees and any other markups set forth in the Agreement.

9.4.2 If unit prices are set forth in the Contract Documents or are subsequently agreed to by the parties, but application of

such unit prices will cause substantial inequity to Owner or Design-Builder because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted.

9.4.3 If Owner and Design-Builder disagree upon whether Design-Builder is entitled to be paid for any services required by Owner, or if there are any other disagreements over the scope of Work or proposed changes to the Work, Owner and Design-Builder shall resolve the disagreement pursuant to Article 10 hereof.

9.5 Emergencies

9.5.1 In any emergency affecting the safety of persons and/or property, Design-Builder shall act, at its discretion, to prevent threatened damage, injury or loss. The Contract Price and/or Contract Time(s) shall be adjusted on account of an emergency as provided in Paragraph 10.1 and Article 9.

Article 10 - Contract Adjustments and Disputes

10.1 Requests for Contract Adjustments and Relief

10.1.1 If either Design-Builder or Owner believes that it is entitled to relief against the other for any event arising out of or related to the Work or Project, such party shall provide written notice to the other party of the basis for its claim for relief. Such notice shall be made prior to incurring any cost or expense and in accordance with any specific notice requirements contained in applicable sections of these General Conditions of Contract. In the absence of any specific notice requirement, written notice shall be given within a reasonable time, not to exceed twenty-one (21) days, after the occurrence giving rise to the claim for relief or after the claiming party reasonably should have recognized the event or condition giving rise to the request, whichever is later. Such notice shall include sufficient information to advise the other party of the circumstances giving rise to the claim for relief, the specific contractual adjustment or relief requested and the basis of such request.

10.2 Dispute Avoidance and Resolution

10.2.1 The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, Design-Builder and Owner each commit to resolving such disputes or disagreements in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.

10.2.2 Design-Builder and Owner will first attempt to resolve disputes or disagreements at the field level through discussions between Design-Builder's Representative and Owner's Representative.

10.2.3 If a dispute or disagreement cannot be resolved on terms satisfactory between and through Design-Builder's

Representative and Owner's Representative, the parties shall follow the State of Oklahoma prescribed methods as set forth in Administrative Rules OAC 580:20-1-22 and 580:20-1-23. If there is a surety and there appears to be a possibility of a Design-Builder's default, the Owner may, but is not obliged to, notify the surety and request the surety's assistance in resolving the controversy.

10.3 Duty to Continue Performance

10.3.1 Unless provided to the contrary in the Contract Documents, Design-Builder shall continue to perform the Work and Owner shall continue to satisfy its payment obligations to Design-Builder, pending the final resolution of any dispute or disagreement between Design-Builder and Owner.

Article 11 - Stop Work and Termination for Cause

11.1 Owner's Right to Stop Work

11.1.1 Owner may, without cause and for its convenience, order Design-Builder in writing to stop and suspend the Work. Such suspension shall not exceed sixty (60) consecutive days or aggregate more than ninety (90) days during the duration of the Project. The right of the Owner to stop Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Design-Builder or any other person or entity, except to the extent required by Paragraph 3.6.

11.1.2 Design-Builder is entitled to seek an adjustment of the Contract Price and/or Contract Time(s) if its cost or time to perform the Work has been adversely impacted by any suspension or stoppage of work by Owner.

11.2 Owner's Right to Perform and Terminate for Cause

11.2.1 If Design-Builder persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Design Consultants or Subcontractors, (v) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time(s), as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, (vii) or if the Design Builder institutes or has instituted against it a case under the United States Bankruptcy Code, then Owner, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth in Sections 11.2.2 and 11.2.3 below.

11.2.2 Upon the occurrence of an event set forth in Section 11.2.1 above, Owner may provide written notice to Design-Builder that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Design-Builder's receipt of such notice. If Design-Builder fails to cure, or reasonably commence to cure, such problem, then Owner may give a second written notice to Design-Builder of its intent to terminate within an additional

seven (7) day period. If Design-Builder, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then Owner may declare the Agreement terminated for default by providing written notice to Design-Builder of such declaration.

11.2.3 Upon declaring the Agreement terminated pursuant to Section 11.2.2 above, Owner may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which Design-Builder hereby transfers, assigns and sets over to Owner for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items. In the event of such termination, Design-Builder shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, if the unpaid balance of the Contract Price exceeds the cost and expense incurred by Owner in completing the Work, such excess shall be paid by Owner to Design-Builder. If Owner's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then Design-Builder shall be obligated to pay the difference to Owner. Such costs and expense shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by Owner in connection with the re-procurement and defense of claims arising from Design-Builder's default.

11.2.4 If Owner terminates the Agreement for cause, the termination may be converted to a termination for convenience in accordance with the provisions of Article 8 of the Agreement.

11.3 Design-Builder's Right to Stop Work

11.3.1 Design-Builder may, in addition to any other rights afforded under the Contract Documents or at law, stop work for Owner's failure to pay amounts properly due upon Design-Builder's submission of proper invoice in accordance with the Fair Pay for Construction Act.

11.3.2 Should the events set forth in Section 11.3.1 above occur, Design-Builder has the right to provide Owner with written notice pursuant to the terms of the Fair Pay for Construction Act.

11.4 Design-Builder's Right to Terminate for Cause

11.4.1 Design-Builder, in addition to any other rights and remedies provided in the Contract Documents or by law, may terminate the Agreement for cause for the following reasons:

- .1 The Work has been stopped for sixty (60) consecutive days, or more than ninety (90) days during the duration of the Project, because of court order, any State authority having jurisdiction over the Work, or orders by Owner under Section 11.1.1 hereof,

provided that such stoppages are not due to the acts or omissions of Design-Builder or anyone for whose acts Design-Builder may be responsible.

- .2 Owner's failure to provide Design-Builder with any information, or approvals that are Owner's responsibility under the Contract Documents which result in the Work being stopped for sixty (60) consecutive days, or more than ninety (90) days during the duration of the Project, even though Owner has not ordered Design-Builder in writing to stop and suspend the Work pursuant to Section 11.1.1 hereof.
- .3 Owner's failure to cure the problems set forth in Section 11.3.1 above after Design-Builder has stopped the Work.

11.4.2 If Design-Builder elects to terminate the Agreement on the occurrence of an event set forth in Section 11.4.1 above, Design-Builder shall provide written notice to Owner that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Owner's receipt of such notice. If Owner fails to cure, or reasonably commence to cure, such problem, then Design-Builder may give a second written notice to Owner of its intent to terminate within an additional seven (7) day period. If Owner, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then Design-Builder may declare the Agreement terminated for default by providing written notice to Owner of such declaration. In such case, Design-Builder shall be entitled to recover in the same manner as if Owner had terminated the Agreement for its convenience under Article 8 of the Agreement.

Article 12 - Miscellaneous

12.1 Assignment

12.1.1 Neither Design-Builder nor Owner shall, without the written consent of the other assign, transfer or sublet any portion or part of the Work or the obligations required by the Contract Documents.

12.2 Successorship

12.2.1 Design-Builder and Owner intend that the provisions of the Contract Documents are binding upon the parties, their partners, employees, agents, heirs, successors and assigns in respect to covenants, agreements and obligations contained in the Contract Documents. The Design-Builder shall not assign the Contract without written consent of the Owner. If the Design-Builder attempts to make such an assignment without such consent, the Design-Builder shall nevertheless remain legally responsible for all obligations under the Contract.

12.3 Governing Law

12.3.1 The Agreement and all Contract Documents shall be governed by the laws of the State of Oklahoma, without giving effect to its conflict of law principles.

12.3.2 Venue on any cause of action relating to this Agreement shall be in Oklahoma County, Oklahoma.

12.4 Severability

12.4.1 If any provision or any part of a provision of the Contract Documents shall be finally determined to be superseded, invalid, illegal, or otherwise unenforceable pursuant to any applicable Legal Requirements, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted.

12.5 No Waiver

12.5.1 The failure of either Design-Builder or Owner to insist, in any one or more instances, on the performance of any of the obligations required by the other under the Contract Documents shall not be construed as a waiver or relinquishment of such obligation or right with respect to future performance.

12.6 Headings

12.6.1 The headings used in these General Conditions of Contract, or any other Contract Document, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.

12.7 Notice

12.7.1 Whenever the Contract Documents require that notice be provided to the other party, notice shall be sent by registered or certified mail, postage prepaid to the address indicated in the Agreement.

12.8 Amendments

12.8.1 The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.

12.9 Rights and Remedies

12.9.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

12.9.2 No action or failure to act by the Owner or Design-Builder shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

12.10 Tests and Inspections

12.10.1 Tests, inspections and approvals of portions of the Work required by the Contract Documents shall be made at appropriate times as specified. Unless otherwise provided, the Design-Builder shall make arrangements and pay for such tests, inspections and approvals with the independent testing laboratory. The Design-Builder shall give the Owner timely notice of when and where tests and inspections are to be made so the Owner may observe such procedures.

12.10.2 If the Owner determines that portions of the Work require additional testing, inspection or approval not included in the Contract Documents, the Owner will instruct the Design-Builder to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Owner of when and where tests and inspections are to be made so the Owner may observe such procedures. The Owner shall bear such costs except as provided in Subparagraph 12.10.3.

12.10.3 If such procedures for testing, inspection or approval under Subparagraphs 12.10.1 and 12.10.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Design-Builder shall bear all costs made necessary by such failure.

12.10.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Design-Builder and promptly delivered to the Owner.

Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

END OF GENERAL CONDITIONS



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

**Standard Form of Agreement Between
Owner and Design-Builder
- Cost Plus Fee with an Option for a
Guaranteed Maximum Price**

AGREEMENT made as of the ____ day of ____, 20____.

BETWEEN the Owner: **State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties Department
Will Rogers Building
2401 N. Lincoln, Suite 106
Oklahoma City, OK 73152-3448**

On behalf of: **Office of Management and Enterprise Services**

And the Design-Builder:

The Project is: **Oklahoma Capitol Restoration - Interior Rehabilitation
2300 N Lincoln Blvd
Oklahoma City**

The Consultant (AE1) is: **Mass Architects
18 W Park Place
Oklahoma City, OK 73103
405.231.1990**

In consideration of the mutual covenants and obligations contained herein, Owner and Design-Builder agree as set forth herein:

ARTICLE 1 THE SCOPE OF WORK

1.1 Design-Builder shall perform all design and construction services, and provide all material, equipment, tools and labor, necessary to complete the Work described in and reasonably inferable from the Contract Documents.

ARTICLE 2 CONTRACT DOCUMENTS

2.1 The Contract Documents are comprised of the following:

2.1.1 All written modifications, amendments, minor changes, and Change Orders to this Agreement (DCAM/CAP Form DB530) issued in accordance with DCAM/CAP Form DB535, *General Conditions for Design Build Contracts* ("General Conditions of Contract");

2.1.2 The Guaranteed Maximum Price ("GMP") Exhibit referenced in Section 6.6.1.1 herein or, if applicable, the GMP Proposal accepted by the Owner in accordance with Section 6.6.2 herein;

2.1.3 This Agreement, including all exhibits (List for example, performance standard requirements, performance incentive arrangements, markup exhibits, allowances, unit prices, or exhibit detailing off-site reimbursable personnel) but excluding, if applicable, the GMP Exhibit;

2.1.4 DCAM/CAP Form DB535, *General Conditions for Design-Build Contracts* ("General Conditions of Contract"); and

2.1.5 Construction Documents prepared and approved in accordance with Section 2.4 of the General Conditions of Contract.

ARTICLE 3 INTERPRETATION AND INTENT

3.1 Design-Builder and Owner, prior to execution of the Agreement (and again, if applicable, at the time of acceptance of the GMP Proposal by Owner in accordance with Section 6.6.2 hereof), shall carefully review all the Contract Documents, including the various documents comprising the Basis of Design Documents, for any conflicts or ambiguities. Design-Builder and Owner will discuss and resolve any identified conflicts or ambiguities prior to execution of the Agreement or, if applicable, prior to Owner's acceptance of the GMP Proposal.

3.2 The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Time(s) for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards. In the event of any inconsistencies, conflict, or ambiguities between or among the Contract Documents are

discovered after execution of the Agreement, or if applicable, after the Owner's acceptance of the GMP Proposal, Design-Builder and Owner shall attempt to resolve any ambiguity, conflict or inconsistency informally, recognizing that the Contract Documents shall take precedence in the order in which they are listed in Section 2.1 hereof.

3.3 Terms, words and phrases used in the Contract Documents, including this Agreement, shall have the meanings given them in the General Conditions of Contract.

3.4 If Owner's Project Criteria contain design specifications: (a) Design-Builder shall be entitled to reasonably rely on the accuracy of the information represented in such design specifications and their compatibility with other information set forth in Owner's Project Criteria, including any performance specifications; and (b) Design-Builder shall be entitled to an adjustment in Contract Price and/or Contract Time(s) to the extent Design-Builder's cost and/or time of performance have been adversely impacted by such inaccurate design specification.

3.5 The Contract Documents form the entire agreement between Owner and Design-Builder and by incorporation herein are as fully binding on the parties as if repeated herein. No oral representations or other agreements have been made by the parties except as specifically stated in the Contract Documents.

ARTICLE 4 OWNERSHIP OF WORK PRODUCT

4.1 All drawings, specifications and other documents and electronic data, including such documents identified in the General Conditions of Contract, furnished by Design-Builder to Owner under this Agreement ("Work Product") are the property of the State of Oklahoma in accordance with the General Conditions of Contract. Owner shall retain ownership and property interests therein, including the copyrights thereto.

ARTICLE 5 CONTRACT TIME

5.1 Date of Commencement. The Work shall commence within five (5) days of Design-Builder's receipt of Owner's Notice to Proceed/Work Order ("Date of Commencement") unless the parties mutually agree otherwise in writing.

5.2 Substantial Completion and Final Completion

5.2.1 Substantial Completion of the entire Work shall be achieved no later than **[Date in words]** (_____) calendar days after the Date of Commencement ("Scheduled Substantial Completion Date").

(If following clause is selected with an "X", it shall hereby become a part of the 5.2.1 Agreement clause.)

The parties agree that the definition for Substantial Completion set forth in Section 1.2.25 of the General Conditions of Contract is hereby modified to read as follows:

"Substantial Completion is the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete in accordance with the Contract Documents so that Owner can occupy and use the Project or a portion thereof for its intended purposes, provided, however, that Substantial Completion shall be deemed to have been achieved no later than the date of issuance of a Temporary Certificate of Occupancy issued by the local building official."

5.2.2 Interim milestones and/or Substantial Completion of identified portions of the Work ("Scheduled Interim Milestone Dates") shall be achieved as identified, if applicable, and set forth in Exhibit _____ hereto.

5.2.3 Final Completion of the Work or identified portions of the Work shall be achieved as expeditiously as reasonably practicable. Final Completion is the date when all Work is complete pursuant to the definition of Final Completion set forth in Section 1.2.7 of the General Conditions of Contract.

5.2.4 All of the dates set forth in this Article 5 (collectively the "Contract Time(s)") shall be subject to adjustment in accordance with the General Conditions of Contract.

5.3 Time is of the Essence. Owner and Design-Builder mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents.

5.4 Liquidated Damages. Design-Builder and Owner have agreed not to provide for liquidated damages in this Agreement for failure of Design-Builder to achieve the Contract Time(s) set forth in this Article 5. Design-Builder understands, however, that Owner may suffer actual damages in the event the Contract Time(s) set forth herein are not timely achieved. Owner shall be able to recover such actual damages from Design-Builder to the extent it can demonstrate that actual damages have been incurred, are directly related and caused by Design-Builder's failure to meet the Contract Time(s) set forth herein, and are not waived by Section 10.5.1 of the General Conditions of Contract.

ARTICLE 6 CONTRACT PRICE

6.1 Contract Price.

6.1.1 Owner shall pay Design-Builder in accordance with Article 6 of the General Conditions of Contract a contract price ("Contract Price") equal to Design-Builder's Fee (as defined in Section 6.2 hereof) plus the Cost of the Work (as described in Section 6.3 hereof), subject to any GMP established in Section 6.6 hereof and any adjustments made in accordance with the

General Conditions of Contract. Unless otherwise provided in the Contract Documents, the Contract Price is deemed to include all sales, use, consumer and other taxes mandated by applicable Legal Requirements.

6.1.2 For the Specific Work set forth below, Owner agrees to pay Design-Builder, as part of the Contract Price, on the following basis: *(This is an optional section intended to provide the parties with flexibility to identify and price limited preliminary services, such as lump sum or cost-plus arrangement for preliminary design, programming, or services necessary to enable Design-Builder to furnish Owner with a GMP before execution of this Agreement.)*

Scope Development services as outlined in RFP to be _____ Dollars (\$ _____)

6.2 Design-Builder's Fee.

6.2.1 Design-Builder's Fee shall be:

_____ percent (_____) of the Cost of the Work, as adjusted in accordance with Section 6.2.2 below.

6.2.2 Design-Builder's Fee will be adjusted as follows for any changes in the Work:

6.2.2.1 For additive Change Orders, including additive Change Orders arising from both additive and deductive items, it is agreed that Design-Builder shall receive a Fee of **Ten** percent (**10%**) of the additional Costs of the Work incurred for that Change Order, plus any other markups set forth in Exhibit _____ hereto.

6.2.2.2 For deductive Change Orders, including deductive Change Orders arising from the additive and deductive items, the deductive amounts shall include: *(The clause selected with an "X" shall hereby become a part of the Agreement.)*

No additional reduction to account for Design-Builder's Fee or any other markup.

An amount equal to the sum of (a) _____ percent (_____) applied to the direct costs of the net reduction (which amount will account for a reduction associated with Design-Builder's Fee); plus (b) any other markups set forth in Exhibit _____ hereto applied to the direct costs of the net reduction.

6.3 Cost of the Work. The term Cost of the Work shall mean costs reasonably and actually incurred by Design-Builder in the proper performance of the Work. The Cost of the Work shall include only the following:

6.3.1 Wages of direct employees of Design-Builder performing the Work at the Site or, with Owner's agreement, at locations off the Site; provided, however, that the costs for those employees of Design-Builder performing design services shall be calculated on the basis of prevailing market rates for design professionals performing such services or, if applicable, those rates set forth in an exhibit to this Agreement.

6.3.2 Wages or salaries of Design-Builder's supervisory and administrative personnel engaged in the performance of the Work and who are located at the Site or working off-Site to assist in the production or transportation of materials and equipment necessary for the Work.

6.3.3 Wages or salaries of Design-Builder's personnel stationed at Design-Builder's principal or branch offices, but only to the extent said personnel are identified in Exhibit _____ and performing the function set forth in said Exhibit. The reimbursable costs of personnel stationed at Design-Builder's principal or branch offices shall include a **zero** percent (**0%**) markup to compensate Design-Builder for the Project-related overhead associated with such personnel.

6.3.4 Costs incurred by Design-Builder for employee benefits, premiums, taxes, insurance, contributions and assessments required by law, collective bargaining agreements, or which are customarily paid by Design-Builder, to the extent such costs are based on wages and salaries paid to employees of Design-Builder covered under Sections 6.3.1 through 6.3.3 hereof.

(If clause is selected with an "X", it shall hereby become a part of the 6.3.4 Agreement clause.)

A multiplier of _____ percent (_____) shall be applied to the wages and salaries of the employees of Design-Builder covered under Sections 6.3.1 through 6.3.3 hereof.

6.3.5 The reasonable portion of the cost of travel, accommodations and meals for Design-Builder's personnel necessarily and directly incurred in connection with the performance of the Work.

6.3.6 Payments properly made by Design-Builder to Subcontractors and Design Consultants for performance of portions of the Work, including any insurance and bond premiums incurred by Subcontractors and Design Consultants.

6.3.7 Costs incurred by Design-Builder in repairing or correcting defective, damaged or nonconforming Work (including any warranty or corrective Work performed after Substantial Completion) executed by the Design-Builder, or those working by or through Design-Builder, provided that such defective, damaged or nonconforming Work was not caused by negligence or failure to fulfill a specific responsibility of the Design-Builder and only to the extent that the costs of repair or correction is not recoverable by the Design-Builder from insurance, sureties, sub-contractors, design consultants or suppliers.

6.3.8 Costs, including transportation, inspection, testing, storage and handling, of materials, equipment and supplies incorporated or reasonably used in completing the Work.

6.3.9 Costs (less salvage value) of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by the workers that are not fully consumed in the performance of the Work and which remain the property of Design-Builder, including the costs of transporting, inspecting, testing, handling, installing, maintaining, dismantling and removing such items.

6.3.10 Costs of removal of debris and waste from the Site.

6.3.11 The reasonable costs and expenses incurred in establishing, operating and demobilizing the Site office, including the cost of facsimile transmissions, long-distance telephone calls, postage and express delivery charges, telephone service, photocopying and reasonable petty cash expenses.

6.3.12 Rental charges and the costs of transportation, installation, minor repairs and replacements, dismantling and removal of temporary facilities, machinery, equipment and hand tools not customarily owned by the workers, which are provided by Design-Builder at the Site, whether rented from Design-Builder or others, and incurred in the performance of the Work.

6.3.13 Premiums for insurance and bonds required by this Agreement or the performance of the Work.

6.3.14 All fuel and utility costs incurred in the performance of the Work.

6.3.15 Sales, use or similar taxes, tariffs or duties incurred in the performance of the Work.

6.3.16 Legal costs, court costs and costs of mediation and arbitration reasonably arising from Design-Builder's performance of the Work, provided such costs do not arise from disputes between Owner and Design-Builder.

6.3.17 Costs for permits, royalties, licenses, tests and inspections incurred by Design-Builder as a requirement of the Contract Documents.

6.3.18 The cost of defending suits or claims for infringement of patent rights arising from the use of a particular design, process, or product required by Owner, paying legal judgments against Design-Builder resulting from such suits or claims, and paying settlements made with Owner's consent.

6.3.19 Deposits which are lost, except to the extent caused by Design-Builder's negligence.

6.3.20 Costs incurred in preventing damage, injury or loss in case of an emergency affecting the safety of persons and property.

6.3.21 Accounting and data processing costs related to the Work.

6.3.22 Other costs reasonably and properly incurred in the performance of the Work to the extent approved in writing by Owner.

6.4 Allowance Items and Allowance Values.

6.4.1 Any and all Allowance Items, as well as their corresponding Allowance Values, are set forth in the GMP Exhibit or GMP Proposal and are included within the GMP.

6.4.2 Design-Builder and Owner have worked together to review the Allowance Items and Allowance Values based on design information then available to determine that the Allowance Values constitute reasonable estimates for the Allowance Items. Design-Builder and Owner will continue working closely together during the preparation of the design to develop Construction Documents consistent with the Allowance Values. Nothing herein is intended in any way to constitute a guarantee by Design-Builder that the Allowance Item in question can be performed for the Allowance Value.

6.4.3 No work shall be performed on any Allowance Item without Design-Builder first obtaining in writing advanced authorization to proceed from Owner. Owner agrees that if Design-Builder is not provided written authorization to proceed on an Allowance Item by the date set forth in the Project schedule, due to no fault of Design-Builder, Design-Builder may be entitled to an adjustment of the Contract Time(s) and Contract Price.

6.4.4 Allowance Value. The Allowance Value for an Allowance Item includes the direct cost of labor, materials, equipment, transportation, taxes and insurance associated with the applicable Allowance Item. All other costs, including design fees, Design-Builder's overall project management and general conditions costs, overhead and fee, are deemed to be included in the original Contract Price, and are not subject to adjustment, regardless of the actual amount of the Allowance Item.

6.4.5 Whenever the actual costs for an Allowance Item is more than or less than the stated Allowance Value, the Contract Price shall be adjusted accordingly by Change Order, subject to Section 6.4.4. The amount of the Change Order shall reflect the difference between actual costs incurred by Design-Builder for the particular Allowance Item and the Allowance Value.

6.5 Non-Reimbursable Costs.

6.5.1 The following shall not be deemed as costs of the Work:

6.5.1.1 Compensation for Design-Builder's personnel stationed at Design-Builder's principal or branch offices, except as provided for in Sections 6.3.1, 6.3.2 and 6.3.3 hereof.

6.5.1.2 Overhead and general expenses, except as provided for in Section 6.3 hereof, or which may be recoverable for changes to the Work.

6.5.1.3 The cost of Design-Builder's capital used in the performance of the Work.

6.5.1.4 If the parties have agreed on a GMP, costs that would cause the GMP, as adjusted in accordance with the Contract Documents, to be exceeded.

6.6 The Guaranteed Maximum Price ("GMP"). *(The clause 6.6 shall be deemed inapplicable and compensation to Design-Builder shall be based on those fees and costs identified in the balance of this Article 6 if the parties do not use a GMP.)*

6.6.1 GMP Established Upon Execution of this Agreement. Not Applicable

6.6.2 GMP Established After Execution of this Agreement.

6.6.2.1 GMP Proposal. If requested by Owner, Design-Builder shall submit a GMP Proposal to Owner which shall include the following, unless the parties mutually agree otherwise:

6.6.2.1.1 A proposed GMP, which shall be the sum of:

- i. Design-Builder's Fee as defined in Section 6.2.1 hereof;
- ii. The estimated Cost of the Work as defined in Section 6.3 hereof, inclusive of any Design-Builder's Contingency as defined in Section 6.6.1.2 hereof; and
- iii. If applicable, any prices established under Section 6.1.2 hereof.

6.6.2.1.2 The Basis of Design Documents, which may include, by way of example, Owner's Project Criteria, which are set forth in detail and are attached to the GMP Proposal;

6.6.2.1.3 A list of the assumptions and clarifications made by Design-Builder in the preparation of the GMP Proposal, which list is intended to supplement the information contained in the drawings and specifications and is specifically included as part of the Basis of Design Documents;

6.6.2.1.4 The Scheduled Substantial Completion Date upon which the proposed GMP is based, to the extent said date has not already been established under Section 5.2.1 hereof, and a schedule upon which the Scheduled Substantial Completion Date is based;

6.6.2.1.5 If applicable, a list of Allowance Items, Allowance Values, and a statement of their basis;

6.6.2.1.6 If applicable, a schedule of alternate prices;

6.6.2.1.7 If applicable, a schedule of unit prices;

6.6.2.1.8 If applicable, a statement of Additional Services which may be performed but which are not included in the GMP and which, if performed, shall be the basis for an increase in the GMP and/or Contract Time(s); and

6.6.2.1.9 The time limit for acceptance of the GMP Proposal.

6.6.2.2 Review and Adjustment to GMP Proposal. After submission of the GMP Proposal, Design-Builder and Owner shall meet to discuss and review the GMP Proposal. If Owner has any comments regarding the GMP Proposal, or finds any inconsistencies or inaccuracies in the information presented, it shall promptly give written notice to Design-Builder of such comments or findings. If appropriate, Design-Builder shall, upon receipt of Owner's notice, make appropriate adjustments to the GMP Proposal.

6.6.2.3 Acceptance of GMP Proposal. If Owner accepts the GMP Proposal, as may be amended by Design-Builder, the GMP and its basis shall be set forth in an amendment to this Agreement.

6.6.2.4 Failure to Accept the GMP Proposal. If Owner rejects the GMP Proposal, or fails to notify Design-Builder in writing on or before the date specified in the GMP Proposal that it accepts the GMP Proposal, the GMP Proposal shall be deemed withdrawn and of no effect. In such event, Owner and Design-Builder shall meet and confer as to how the Project will proceed, with Owner having the following options:

6.6.2.4.1 Owner may suggest modifications to the GMP Proposal, whereupon, if such modifications are accepted in writing by Design-Builder, the GMP Proposal shall be deemed accepted and the parties shall proceed in accordance with Section 6.6.2.3 above;

6.6.2.4.2 Owner may authorize Design-Builder to continue to proceed with the Work on the basis of reimbursement as provided in Section 6.1 hereof without a GMP, in which case all references in this Agreement to the GMP shall not be applicable; or

6.6.2.4.3 Owner may terminate this Agreement for convenience in accordance with Article 8 hereof; provided, however, in this event, Design-Builder shall not be entitled to the payment provided for in Section 8.2 hereof.

ARTICLE 7 PROCEDURE FOR PAYMENT

7.1 Progress Payments.

7.1.1 Design-Builder shall submit to Owner on the **twenty-eighth (28th)** day of each month, beginning with the first month after the Date of Commencement, Design-Builder's Application for Payment (DCAM/CAP Form G702/G703) in accordance with Article 6 of the General Conditions of Contract.

7.1.2 Owner shall make payment within thirty (30) days after Owner's receipt of each properly submitted and accurate Application for Payment in accordance with Article 6 of the General Conditions of Contract, but in each case less the total of payments previously made, and less amounts properly withheld under Section 6.3 of the General Conditions of Contract. All Payments shall be in accordance with the Fair Pay for Construction Act.

7.1.3 If Design-Builder's Fee under Section 6.2.1 hereof is a fixed amount, the amount of Design-Builder's Fee to be included in Design-Builder's monthly Application for Payment and paid by Owner shall be proportional to the percentage of the Work completed, less payments previously made on account of Design-Builder's Fee.

7.2 Retainage on Progress Payments.

7.2.1 Owner will retain **five percent (5%)** of each Application for Payment provided, however, that when fifty percent (50%) of the Work has been satisfactorily completed by Design-Builder and Design-Builder is otherwise in compliance with its contractual obligations, Owner will not retain any additional retention amounts from Design-Builder's subsequent Applications for Payment. Owner will also reasonably consider reducing retainage for Sub-contractors completing their work early in the Project.

7.2.2 Upon Substantial Completion of the entire Work or, if applicable, any portion of the Work, pursuant to Section 6.6 of the General Conditions of Contract, Owner shall release to Design-Builder all retained amounts relating, as applicable, to the entire Work or completed portion of the Work, less an amount equal to: (a) 150% of the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion and in accordance with the Fair Pay for Construction Act Title 61 Section 226, and (b) all other amounts Owner is entitled to withhold pursuant to Section 6.3 of the General Conditions of Contract.

7.3 Final Payment. Design-Builder shall submit its Final Application for Payment to Owner in accordance with Section 6.7 of the General Conditions of Contract. Owner shall make payment on Design-Builder's properly submitted and accurate Final Application for Payment (less any amount the parties may have agreed to set aside for warranty work) within thirty (30) days after Owner's receipt of the Final Application for Payment, provided that Design-Builder has satisfied the requirements for final payment set forth in Section 6.7.2 of the General Conditions of Contract.

7.4 Interest. Payments due and unpaid by Owner to Design-Builder, whether progress payments or final payment, shall bear interest in accordance with the Fair Pay for Construction Act.

7.5 Record Keeping and Finance Controls. Design-Builder acknowledges that this Agreement is to be administered on an "open book" arrangement relative to Costs of the work. Design-Builder shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management, using accounting and control systems in accordance with general accepted accounting principles and as may be provided in the Contract Documents. During the performance of the Work and for a period of three (3) years after Final Payment, Owner and Owner's accountants shall be afforded access to, and the right to audit from time-to-time, upon reasonable notice, Design-Builder's records, books, correspondence, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to the Work, all of which Design-Builder shall preserve for a period of three (3) years after Final Payment. Such inspection shall take place at Design-Builder's offices during normal business hours unless another location and time is agreed to by the parties. Any multipliers or markups agreed to by the Owner and Design-Builder as part of this Agreement are only subject to audit to confirm that such multiplier or markup has been charged in accordance with this Agreement, with the composition of such multiplier or markup not being subject to audit.

ARTICLE 8 TERMINATION FOR CONVENIENCE

8.1 Upon ten (10) days' written notice to Design-Builder, Owner may, for its convenience and without cause, elect to terminate this Agreement. In such event, Owner shall pay Design-Builder for the following:

8.1.1 All Work executed and for proven loss, cost or expense in connection with the Work;

8.1.2 The reasonable costs and expenses attributable to such termination, including demobilization costs and amounts due in settlement of terminated contracts with Sub-contractors and Design Consultants.

8.1.3 The fair and reasonable sums for overhead and profit on the sum of items 8.1.1 and 8.1.2 above.

8.2 In addition to the amounts set forth in Section 8.1 above, if Owner terminates this Agreement prior to commencement of construction, Design-Builder shall be paid zero percent (0%) of the remaining balance of the Contract Price, provided, however, that if a GMP has not been established, the above percentage shall be applied to the remaining balance of the most recent estimated Contract Price.

8.3 If Owner terminates this Agreement pursuant to Section 8.1 above and proceeds to design and construct the Project through its employees, agents or third parties, Owner's rights to use the Work construct the Project through its employees, agents or third parties, Owner's rights to use the Work others without Design-Builder's express written consent and such third parties' agreement to the terms of Article 4.

ARTICLE 9 REPRESENTATIVES OF THE PARTIES

9.1 Owner's Representative.

9.1.1 Owner designates the individual listed below as its Representative ("Owner Representative"), which individual, or his designee, has the authority and responsibility for avoiding and resolving disputes under Section 3.4 and 10.2.3 of the General Conditions of Contract:

Mickerl Jones

Director
Construction & Properties Department
Division of Capital Assets Management
Office of Management and Enterprise Services

P.O. Box 53448
Oklahoma City, OK 73152-3448
(405) 521.3171
mike.jones@omes.ok.gov

9.2 Design-Builder's Representatives

9.2.1 Design-Builder designates the individuals listed in Exhibit ____ as its Representatives with their respective titles, authorities and responsibilities.

9.3 Using Agency's Representatives

9.3.1 Using Agency designates the individual listed below as its Using Agency's Representative:

ARTICLE 10 BONDS AND INSURANCE

10.1 Bonds and Other Performance Security. Design-Builder shall provide in accordance with Article 5 of the General Conditions of Contract the following state required bonds and security:

10.1.1 Performance Bond for 100% of the value of the Contract to ensure completion of the work.

10.1.2 Payment Bond for 100% of the Contract to assure that the Owner is protected from the action of sub-contractors, suppliers and employees for unpaid debts of the Design-Builder.

10.1.3 Defect Bond for 100% of the value of the Contract to provide correction of defects in the construction and equipment for one year after acceptance of the Work.

10.2 Letter of Credit. Irrevocable Letters of Credit may be used as a substitute for the bonds required in Section 10.2. Each Letter of Credit must be on the forms prescribed and provided by the Owner and issued by a financial institution insured by Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation. Each Letter of Credit must be for the total value of the contract.

10.3 Insurance. Design-Builder shall procure in accordance with Article 5 of the General Conditions of Contract the state required coverage amounts of the following insurance coverage's:

10.3.1 Worker's Compensation Insurance shall not be less than statutory limit.

10.3.2 Employer's Liability Insurance shall not be less than \$500,000 each accident, \$500,000 disease each employee, and \$500,000 disease policy limit.

10.3.3 Commercial General Liability (including Products-completed operations, Contractual Liability, Personal & Advertising Injury) shall be not less than \$2,000,000 each occurrence.

10.3.4 Automobile, Liability Insurance. Such insurance shall extend to owned, non-owned and hired automobiles used in the performance of this Agreement. The limits of liability of such insurance shall be not less than \$2,000,000 per Combined Single Limit of each accident.

10.3.5 Builder's Risk Insurance shall not be less than minimum limits equal to the contract value.

10.3.6 Professional Liability insurance shall be not less than \$1,000,000.00 or **\$5,000,000.00**, whichever is greater.

ARTICLE 11 OTHER PROVISIONS

11.1 Other provisions are as follows:

11.1.1 Key Personnel, Subcontractors and Outside Associates or Consultant. In connection with this contract, any in-house personnel, subcontractors, and outside associates or consultants will be limited to individuals or firms that were specifically identified in the Design-Builder's accepted proposal. The Design-Builder will obtain the Owner's written consent before making any substitution for these designated in-house personnel, subcontractors, associates, or consultants.

11.1.2 Responsibility of the Design-Builder for Design. The Design-Builder will be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other non-construction services furnished by the Design-Builder under this contract. The Design-Builder will, without additional compensation, correct or revise any errors or deficiency in its designs, drawings, specifications, and other non-construction services and perform any necessary rework or modifications, including any damage to real or personal property, resulting from the design error or omission.

The standard of care for all design services performed under this agreement will be the care and skill ordinarily used by members of the architectural or engineering professions practicing under similar conditions at the same time and locality. Notwithstanding the above, in the event that the contract specifies that portions of the Work be performed in accordance with a performance standard, the design services shall be performed so as to achieve such standards.

Neither the Owner's review, approval or acceptance of; nor payment for, the services required under this contract, will be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract. The Design-Builder will be and remain liable to the Owner in accordance with applicable law for all damages to the Owner caused by the Design-Builder's negligent performance of any of these services furnished under this contract

The rights and remedies of the Owner provided for under this contract are in addition to any other rights and remedies provided by law.

If the Design-Builder is comprised of more than one legal entity, each entity will be jointly and severally liable hereunder.

11.1.3 Audits and Records Clause. As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form. In accepting any contract with the State, the Consultant agrees any pertinent State or Federal agency will have the right to examine and audit all records relevant to execution of the resultant contract. The consultant is required to retain all records relative to this contract for the duration of the contract term and for a period of three years following completion and/or termination of the contract. If an audit, litigation, or other action involving such records are started before the end of the three year period, the records are required to be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later.

11.1.4 Fair Pay for Construction Act. Design Consultant shall have the same rights and terms as a Subcontractor.

11.1.5 State of Oklahoma Governor's Executive Order 2012-01. Per the State of Oklahoma Governor's Executive Order 201201, filed February 6, 2012 and effective July 1, 2012, the use of any tobacco product shall be prohibited on any and all properties owned, leased or contracted for use by the State of Oklahoma, including but not limited to all buildings, land and vehicles owned, leased or contracted for use by agencies or instrumentalities of the State of Oklahoma.

11.1.6 The Contractor certifies that it and all proposed subcontractors, whether known or unknown at the time this contract is executed or awarded, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employee Verification Program (E-Verify) available at www.dhs.gov/E-Verify.

ARTICLE 12 ENUMERATION OF THE DESIGN-BUILD DOCUMENTS

12.1 The Design Build Documents, except for Modifications issued after execution of this Agreement, are enumerated as follows:

12.1.1 The Documents, if any, and accepted by the Owner, consist of the following:

Document	Date
----------	------

12.1.2 Other Documents, if any, forming part of the Design-Builder's documents are as follows:

- Notice to Proceed/Work Order**
- Purchase Order**

In executing this Agreement, Owner and Design-Builder each individually represents that it has the necessary financial resources to fulfill its obligations under this Agreement, and each has the necessary corporate approvals to execute this Agreement, and perform the services described herein.

This Agreement entered into as of the day and year written above.

STATE OF OKLAHOMA
DIVISION OF CAPITAL ASSETS MANAGEMENT

[INSERT DESIGN-BUILDER]

(Owner) (Date Signed)

Mickerl Jones
Acting State Construction Administrator
Construction and Properties Department

(Design-Builder Signature) (Date Signed)

(Printed Name and Title)

(EIN/TIN Number)

The Using Agency certifies that funds are available and dedicated to complete the contract sums stated in this Contract. The Using Agency agrees to pay all project related costs including but not limited to work related to unknown site conditions, remediation of discovered environmental conditions, legal expenses, judgments and any reasonable project related expense.

OFFICE OF MANAGEMENT & ENTERPRISE SERVICES

(Using Agency Authorized Representative Signature) (Date Signed)

(Printed name and title)



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Non-Collusion Affidavit

The statement below must be signed and notarized before this contract will become effective

STATE OF _____)
) ss
COUNTY OF _____)

Project Name: _____
CAP Project #: _____

_____, of lawful age, being first duly sworn, on oath states,
(S)he is the duly authorized agent of _____, the Design-
Builder under the contract which is attached to this statement, for the purpose of certifying the facts pertaining to the giving of things of
value to government personnel in order to procure said Contract;.

(S)he is fully aware of the facts and circumstances surrounding the making of the Contract to which this statement is attached and has
been personally and directly involved in the proceedings leading to the procurement of said Contract: and

Neither the Design-Builder nor anyone subject to the Design-Builder's direction or control has paid, given or donated or agreed to pay,
give or donate to any office or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in
procuring the Contract to which this statement is attached.

(Design-Builder Printed Name)

(Design-Builder Signature)

Subscribed and sworn to (or affirmed) before me on _____ day of _____, 20 ____

(Signature of notarial officer)

(Seal)

My Commission Expires: _____

My Commission #: _____



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Performance Bond

Any singular reference to Design-Builder, Surety, Owner or other party shall be considered plural where applicable. This document may not be altered or modified.

DESIGN-BUILDER (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER: Construction and Properties Department
Division of Capital Assets Management
Office of Management and Enterprise Services
State of Oklahoma
P.O. Box 53448
Oklahoma City, OK. 73152-3448

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description (Name and Location):

BOND:

Date (Not earlier than Construction Contract Date):

Amount: \$

DESIGN-BUILDER (Representative):

SURETY (Representative):

Signature: _____

Signature: _____

Name and Title:

Name and Title:

(FOR INFORMATION ONLY-Name, Address and Telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1. The Design-Builder and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Design-Builder performs the Construction Contract, the Surety and the Design-Builder shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3. The Surety's obligation under this Bond shall arise after:

3.1 The Owner has notified the Design-Builder and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Design-Builder Default and has requested and attempted to arrange a conference with the Design-Builder and the Surety to be held not later than ten (10) days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Design-Builder and the Surety agree, the Design-Builder shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Design-Builder's Default; and

3.2 The Owner has declared a Design-Builder Default and formally terminated the Design-Builder's right to complete the contract. Such Design-Builder Default shall not be declared earlier than seven (7) days after the Design-Builder and the Surety have received notice as provided in Subparagraph 3.1; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions.

4.1 Arrange for a Design-Builder, with consent of the Owner, to perform and complete the Construction Contract; or

4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3 Obtain proposals or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Design-Builder's default; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

4.1.1. After investigation, determine the amount for which it may be liable to the Owner, and as soon as practicable after the amount is determined, tender payment therefor to the Owner; or

4.1.2. Deny liability in whole or in part and notify the Owner citing reasons therefor.

5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fourteen (14) days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6. After the Owner has terminated the Design-Builder's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Design-Builder under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the Design-Builder for correction of defective work and completion of the Construction Contract;

6.2 Additional legal, design professional and delay costs resulting from the Design-Builder's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Design-Builder.

7. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

8. Notice to the Surety, the Owner or the Design-Builder shall be mailed or delivered to the address shown on the signature page.

9. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provisions in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

10. DEFINITIONS

10.1 Balance of the Contract Price: The total amount payable by the Owner to the Design-Builder under the Construction Contract after all proper adjustments have

been made, including allowance to the Design-Builder of any amounts received or to be received by the Owner in Settlement of insurance or other claims for damages to which the Design-Builder is entitled, reduced by all valid and proper payments made to or on behalf of the Design-Builder under the Construction Contract.

10.2Construction Contract: The agreement between the Owner and the Design-Builder identified on the signature page, including all Contract Documents and changes thereto.

10.3Design-Builder Default: Failure of the Design-Builder, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

10.4Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Design-Builder as required by the Construction Contract.



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Payment Bond

Any singular reference to Design-Builder, Surety, Owner or other party shall be considered plural where applicable. This document may not be altered or modified.

DESIGN-BUILDER (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER: Construction and Properties Department
Division of Capital Assets Management
Office of Management and Enterprise Services
State of Oklahoma
P.O. Box 53448
Oklahoma City, OK. 73152-3448

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description (Name and Location):

BOND:

Date (Not earlier than Construction Contract Date):

Amount: \$

DESIGN-BUILDER (Representative):

SURETY (Representative):

Signature: _____

Signature: _____

Name and Title:

Name and Title:

(FOR INFORMATION ONLY-Name, Address and Telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1 The Design-Builder and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2 With respect to the Owner, this obligation shall be null and void if the Design-Builder:

2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Design-Builder and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits to the Design-Builder and the Surety, and provided there is no Owner Default.

3 With respect to Claimants, this obligation shall be null and void if the Design-Builder promptly makes payment, directly or indirectly, for all sums due.

4 The Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with the Design-Builder have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with the Design-Builder:

4.2.1. Have furnished written notice to the Design-Builder and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

4.2.2. Have either received a rejection in whole or in part from the Design-Builder, or not received within 30 days of furnishing the above notice any communication from the Design-Builder by which the Design-Builder has indicated the claim will be paid directly or indirectly; and

4.2.3. Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Design-Builder.

5 If a notice required by Paragraph 4 is given by the Owner to the Design-Builder or to the Surety, that is sufficient compliance.

6 When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2 Pay or arrange for payment of any undisputed amounts.

7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8 Amounts owed by the Owner to the Design-Builder under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Design-Builder furnishing and the Owner accepting this Bond, they agree that all funds earned by the Design-Builder in the performance of the Construction Contract are dedicated to satisfy obligations of the Design-Builder and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

10 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

11 Notice to the Surety, the Owner or the Design-Builder shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Design-Builder, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

12 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

13 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Design-Builder shall promptly furnish a copy of this Bond or shall permit a copy to be made.

14 DEFINITIONS

14.1. Claimant: An individual or entity having a direct contract with the Design-Builder or with a subcontractor of the Design-Builder to furnish labor, materials or equipment

for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Design-Builder and the Design-Builder's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

14.2. Construction Contract: The agreement between the Owner and the Design-Builder identified on the signature page, including all Contract Documents and changes thereto.

14.3. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Design-Builder as required by the Construction Contract.



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Statutory Defect Bond
61 O.S. 1991, Section 113 (B)(3)

KNOW ALL MEN BY THESE PRESENTS;

That _____, as Principal and _____

a corporation organized under the laws of the State of _____ and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto the State of Oklahoma in the penal sum of

_____ Dollars (\$_____) in lawful money of the United States of America, said sum being equal to One Hundred percent (100%) of the Contract price, for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents:

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written contract with the State of Oklahoma, dated _____, for

_____ CAP Project Number _____ all in compliance with the plans and specifications therefore, made a part of said contract and on file in the Division of Capital Assets Management, Construction and Properties Department, 2401 N. Lincoln Blvd., Suite 106, Oklahoma City, Oklahoma 73105.

NOW, THEREFORE, if said Principal shall pay or cause to be paid to the State of Oklahoma all damage, loss, and expense which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of one (1) year from and after the acceptance of said project by the State of Oklahoma; then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney- in-fact, duly authorized so to do, the day and year set forth below.

DATED this _____ day of _____, 20____

Principal: _____

By _____ (Title): _____

ATTEST: _____

Surety: _____ (Attorney-in-fact)

By: _____

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Change Order

IMPORTANT NOTE: THE WORK DESCRIBED HEREIN IS NOT AUTHORIZED UNTIL THIS CHANGE ORDER IS COMPLETED AND SIGNED BY ALL ENTITIES LISTED BELOW. DO NOT PROCEED WITH WORK UNTIL THE CHANGE ORDER IS COMPLETED AND SIGNED BY EACH PARTY.

This form is required and shall be prepared by the Design-Builder. All costs must be broken down.

DATE: FROM PROPOSAL REQUEST PROJECT NAME: DESIGN-BUILDER: BRIEF DESCRIPTION OF CHANGE: P. O. NUMBER: CAP PROJECT NUMBER: CONTRACT NUMBER: DCAM/CAP PROJ. MANAGER: CHANGE ORDER NUMBER:

BRIEF DESCRIPTION OF TIME DELAY:

Not valid until signed by the Design-Builder, Consultant and Authorized CAP Representative.

The original Contract Sum Guaranteed Maximum Price was \$
Net change by previously authorized Change Orders \$
The Contract Sum Guaranteed Maximum Price prior to this Change Order was \$
The Contract Sum Guaranteed Maximum Price will be increased decreased unchanged by this Change Order in the amount of \$
The new Contract Sum Guaranteed Maximum Price including this Change Order will be \$
The Contract Time will be increased decreased unchanged by Calendar Days
The date of Substantial Completion as of the date of this Change Order therefore is Date

APPROVALS:

(Design-Builder Name) (Authorized Representative Signature) (Date)

(Consultant-AE1 Name) (Authorized Representative Signature) (Date)

(Using Agency) (Authorized Representative Signature) (Date)

Table with 8 columns: GL Unit, Acct, Sub-Acct, Fund Type, Class Fund, Dept, Bud Ref, Oper. Unit. Row 1: OCIA Funding Approval (if applicable) - Initial: (Attach Agency Change Order Request Form 010A/B if necessary)

Mickerl Jones (Authorized CAP Representative) (Signature) (Date)

(DCAM/CAP Project Manager)



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

**Change Order
Cost Breakdown**

(1) Materials	Unit	Unit Cost	Total
Subtotal (1)			

(2) Labor	No. Of Hours	Hourly Cost	Total
Subtotal (2)			

(3) Equipment	No. Of Hours	Hourly Cost	Total
Subtotal (3)			

(4) Sub Contractors (List each Sub Contractor)	Total
Subtotal (4)	

Column 1	Column 2
Insurance Cost	Overhead Costs (15% Maximum of 1,2 & 3)
Bond Cost	Profit (10% Maximum of 1,2 & 3)
Social Security Taxes (FICA)	Overhead Costs & Profit (Total limited to 15% of 4)
Other Taxes	Total of Column 2
Worker's Compensation	Total of Column 1
Employee Fringe Benefits	
Total of Column 1	Total for this Page (Subtotals 1 - 4, and Col. 1 & 2 Totals)



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Change Order
Explanation

REQUESTED BY: [] Design-Builder [] Consultant [] Using Agency [] Owner (DCAM/CAP)

REASON FOR CHANGE: (check box) Detailed explanation required below.

- [] Unforeseen site condition. [] Work not specified in Contract Documents, but essential to completion of the project.
[] Scope change: Using Agency request.
[] Scope change: DCAM/CAP request. [] Other: (Describe)

Provide a detailed description of the proposed change in the Work and provide detailed reasons why this change is necessary.

DETAILED REASON FOR CHANGE IN THE WORK:

CONTRACT TIME REQUEST EXPLANATION:

(Describe how the time requested will extend the "critical path" of the project schedule and will not be concurrent with other work.)



**State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties**

Application Checklist

The following documents and forms are required to be submitted. Incomplete submittals will be returned to the Consultant or Design-Builder for completion and re-submittal. Originals are considered to be documents (1) executed with blue-ink and submitted in physical form, (2) executed with blue-ink, scanned in color and submitted electronically, or (3) executed using electronic signature and submitted electronically.

MONTHLY CONSULTANT CERTIFICATE FOR PAYMENT

Submit one (1), electronic preferred, original of each document and form:

- DCAM/CAP Form G129 – Consultant's Certificate for Payment Invoice
- Consultant's monthly progress report

MONTHLY CONSTRUCTION PROGRESS PAYMENTS

Submit one (1), electronic preferred, original of each document and form:

- DCAM/CAP Form G702 – Application and Certificate for Payment, or approved alternate form,
- DCAM/CAP Form G703 – Application and Certificate for Payment Continuation Sheet(s), or approved alternate form,

Invoice Affidavit for Certificate for Payment:

- DCAM/CAP Form – G109 - Invoice Affidavit for Certificate of Payment (for Projects without a Consultant),
OR
- DCAM/CAP Form – G109A - Invoice Affidavit for Certificate of Payment (for Projects with a Consultant),

CHANGE ORDER

Submit one (1), electronic preferred, original:

- DCAM/CAP Form G701DB - Change Order (include all three pages).

FINAL PAYMENT APPLICATIONS

Submit one (1), electronic preferred, original of each document and form

- DCAM/CAP Form G702 – Application and Certification for Payment, or approved alternate form,
- DCAM/CAP Form G703 – Application and Certificate for Payment Continuation Sheet(s), or approved alternate form,

Invoice Affidavit for Certificate for Payment:

- DCAM/CAP Form – G109 - Invoice Affidavit for Certificate of Payment (for Projects without a Consultant),
OR
- DCAM/CAP Form – G109A - Invoice Affidavit for Certificate of Payment (for Projects with a Consultant),
- DCAM/CAP Form A106 – Certificate of Contract Completion (2 pages),
- DCAM/CAP Form A110 – Affidavit for Final Payment
- Certified Copy or Original, Power of Attorney from Surety Company



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Invoice Affidavit for Certificate of Payment
(Attach to Application for Payment G702)

STATE OF _____)
) ss
COUNTY OF _____)

Project Name: _____
CAP Project No.: _____

In accordance with the Contract Documents, including but not limited to the plans and specifications, based on on-site observations and the data comprising this application, the Consultant certifies to the Owner that to the best of their knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, including but not limited to the plans and specifications, and the Design-Builder is entitled to payment of the Amount Certified.

(Consultant Printed Name)

(Authorized Representative Signature)

Subscribed and sworn to (or affirmed) before me on _____ day of _____, 20__

(Signature of notarial officer)

(Seal)

My Commission Expires: _____

My Commission #: _____



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

() Partial
Certificate of Substantial
Completion

Form with fields for Project Name, CAP Project Number, Using Agency, Contract Number, and Design-Builder Organization Name.

The work performed under this contract has been inspected by authorized representatives of the Agency, the Design-Builder, the Consultant and the Division of Capital Assets Management and the Project, or portion of the Project, specified above is declared to be sufficiently completed in accordance with the contract documents so that the Agency may occupy or utilize the Project, or specified portion of the Project, for use for which it was intended.

A list of items to be completed or corrected is appended hereto. This list may not be exhaustive and the failure to include an item on it does not alter the responsibility of the Design-Builder to complete all the Work in accordance with the Contract Documents.

Signature line for Consultant with fields for By, Authorized Representative Signature, and Date.

The Design-Builder accepts this Certificate of Substantial Completion and agrees to complete and correct the items of work on the attached list within thirty (30) days or as mutually agreed in writing by the Design-Builder and the Owner.

Signature line for Design-Builder Organization Name with fields for By, Authorized Representative Signature, and Date.

The Owner accepts this Certificate of Substantial Completion and agrees the Project, or specified portion of the Project, as described above as substantially complete and will assume full possession of the Project or areas of the Project at [time] on [date]. The responsibility for heat, utilities security and insurance under the contract documents shall be as set forth below under "Remarks".

Signature line for State of Oklahoma DCAM/Construction and Properties Department with fields for By, Authorized Representative Signature, and Date.

Remarks:



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Certificate of Contract Completion
(Page 1 of 2)

STATE OF _____) Project Name: _____
) ss
COUNTY OF _____) CAP Project #: _____

Agency: _____

Design-Builder: _____

Contract Amount: _____

Contract Number: _____ Contract Date _____

DESIGN-BUILDER'S AFFIDAVIT

I DO SOLEMNLY SWEAR AND AFFIRM: That the work under the above named contract and all amendments thereto have been completed in accordance with the requirements of said contract; that all costs incurred for equipment, materials, labor, and services against the project have been paid; that no liens have been attached against the project; that all Workmen's Compensation claims are covered by Workmen's Compensation Insurance as required by law; that all public liability claims are adequately covered by insurance; that I, acting for the Design-Builder, shall save, protect, defend, indemnify, and hold the Owners harmless from and against all claims which arise as a direct or indirect result of any transaction, event or occurrence related to performance of the work included under said contract.

(Design-Builder Printed Name)

(Authorized Representative Signature)

(Authorized Representative Title)

(Date)

This instrument was acknowledged before me on _____ day of _____, 20__

by _____ as _____ of _____
(Design-Builder Name) (Type of Authority) (Design-Builder Organization)

(Signature of notarial officer)

(Seal) My Commission Expires: _____
My Commission #: _____



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Certificate of Contract Completion
(Page 2 of 2)

CERTIFICATE OF CONSULTANT

I CERTIFY: That the work under the above described Contract has been satisfactorily completed under the terms of the Contract; that the Project is recommended for occupancy by the Using Agency; that the Design-Builder has submitted his sworn affidavit as evidence that he has paid all labor, materials, and other charges against this project in accordance with the terms of the contract; and that all records, documents, and drawings required by the Contract have been submitted to the Division of Capital Assets Management.

Table with 3 columns: Description, Date, Days. Rows include Contract date, Date work order issued, Days allowed by contract for completion, Date work began, Extension allowed by Change Orders, Date of Substantial Completion, Days in excess of contract period, Days less than contract period.

(Date) (Consultant Organization)

(Consultant Printed Name) (Authorized Representative Signature)

CERTIFICATE OF ACCEPTANCE BY USING AGENCY

THIS IS TO CERTIFY: That based upon the statements made in the above affidavit and certificate, the project is hereby accepted as completed for occupancy, operation and maintenance.

(Date) (Using Agency Name)

(Representative Printed Name) (Authorized Representative Signature) (Representative Title)

APPROVAL BY THE DIVISION OF CAPITAL ASSETS MANAGEMENT

This project is accepted as complete. The using agency is authorized to make final payment.

(Date) (Project Manager)



State of Oklahoma
Office of Management and Enterprise Services
Division of Capital Assets Management
Construction and Properties

Affidavit for Final Payment

STATE OF _____) Project Name: _____
) ss
COUNTY OF _____) CAP Project #: _____

The undersigned, being first duly sworn, testifies as follows:

That affiant is the _____ of _____
(Officer) (Company)

and that in signing and delivery of this affidavit he is acting for and on behalf of said company.

That said company is the Design-Builder engaged in construction:

(Name of Project)

at _____
(Location of Project)

for the State of Oklahoma (Office of Management and Enterprise Services, Division of Capital Assets Management) pursuant to a written contract entered into with the Division of Capital Assets Management. That the construction of said project has been fully and finally completed in accordance with the written contract and all amendments thereto, if any. The company represents that there are no existing judgments, claims, accounts, liens, or other similar type of obligations outstanding and unpaid arising under said contract or from labor or materials having been furnished for or delivered to said project. Further, the company represents that all persons or entities furnishing labor or materials used in said project, or under said contract, have been paid in full.

(Authorized Representative Printed Name)

(Authorized Representative Signature)

Subscribed and sworn to (or affirmed) before me on _____ day of _____, 20____

(Signature of notarial officer)

(Seal) My Commission Expires: _____
My Commission #: _____

CERTIFICATE OF APPROVAL

The undersigned, agent or Attorney-in-fact for _____
Surety Company, acting for and on behalf of said Surety Company, acknowledges having seen the above affidavit executed by

_____ further that the undersigned hereby approves the affidavit and directs
That the owner of said project is hereby authorized to make final payment under the contract to the Design-Builder.

Surety Company specifically releases the State of Oklahoma from any responsibility should any unpaid accounts or claims
Arise against Design-Builder for labor or material furnished under said contract or delivered and used in said project.

(Attorney-in-fact for Surety Company)

(Attach a Certified Copy of Power-of-Attorney)

INDEX OF SECTIONS

- 002211 Proposal Preparation
- 002220 Proposal Evaluation
- 011001 Interior Scope of Work
- 011002 Performance Specifications
- 012100 Allowances
- 012200 Unit Prices
- 012900 Payment Procedures
- 013100 Project Management and Coordination
- 013200 Construction Progress Documentation
- 013233 Photographic Documentation
- 013300 Submittal Procedures
- 013316 Design After Award
- 013591 Historic Treatment Procedures
- 014000 Quality Requirements
- 015002 Temporary Facilities and Controls
- 016000 Product Requirements
- 017300 Execution
- 017329 Cutting and Patching
- 017419 Construction Waste Management and Disposal
- 017700 Closeout Procedures
- 017823 Operation and Maintenance Data
- 017839 Project Record Documents
- 017900 Demonstration and Training

Attachments

END OF INDEX OF SECTIONS

SECTION 002211 – PROPOSAL PREPARATION

PART 1 - GENERAL

1.1 GENERAL INFORMATION

- A. The scope of this project includes all work required to design and construct the interior repairs and rehabilitation of the Oklahoma State Capitol Building. Provide the work in accordance with the Request for Proposal Phase II (RFP Phase II) documents. The State of Oklahoma Office of Management and Enterprise Services, Division of Capital Asset Management, Construction and Properties Department (CAP) has solicited registered design-build entities interested in designing and constructing this 100% state funded project in Oklahoma City, Oklahoma. All pre-registered design-build entities were eligible to propose in Phase I of the selection process, the RFQ Phase I. Three firms were short listed to propose in RFP Phase II.
- B. Those offerors short-listed in RFQ Phase I are invited to submit a RFP Phase II proposal, as indicated below.
- C. The RFP Phase II proposal process will consist of two parts. The first part is a written and graphic proposal response delivered to OMES containing the Design Builder's response to the criteria listed herein. The second part will be a verbal presentation to the selection committee where the respondent is given the opportunity to present the actual team members assigned, give pertinent project information germane to this project and demonstrate how their specific expertise will provide the best solutions for this project
- D. Failure to follow this format may result in the proposal being misinterpreted and could result in a lower overall ranking for such proposal.
- E. The Owner Project Team consists of the Office of Management and Enterprise Services (OMES); the Construction and Properties Department of the Division of Capital Assets Management at OMES; and our AE1 Consultant/Capitol Architect, Mass Architects and their consultants.

1.2 PROJECT DESCRIPTION

- A. The Interior Rehabilitation of the Oklahoma State Capitol will involve a restoration and rehabilitation of the interior of the Capitol. The Goals and Criteria for this project, as approved and adopted by the State Capitol Oversight Committee, were attached to the Interior Request for Qualifications. These project RFP Phase II documents include an outline that describes the design and construction desired as part of the project based on the Goals and Criteria. The selected Design Build team shall validate these improvements and add to the list of the building components needing rehabilitation through the Scope Development phase. A list of the scope items may include, but are not limited to, the following list:
 - 1. Architectural
 - a. Repairs to basement floor.
 - b. Rehabilitate above-grade floors and base
 - c. Rehabilitate walls and ornamentation
 - d. Rehabilitate ceilings and ornamentation
 - e. Re-establish South entry
 - f. Entry improvements
 - g. Doors, frames and hardware
 - h. Stairs, handrails and guardrails
 - i. Follow-on repairs
 - j. Replace elevators

- k. Signage
- l. Window treatments
- m. Develop historic displays
- n. Additional storage
- 2. Improve Historic Aesthetics
 - a. Establish Preservation Zones
 - b. Establish standards for common building elements
 - c. Identify historic lighting
 - d. Enhance mechanical and electrical items
 - e. Refurbish doors, frames and hardware
- 3. Life Safety
 - a. Perform a code review
 - b. Identify code deficiencies
 - c. Review and improve exiting
 - d. Extend fire suppression system
 - e. Review and improve fire alarm system
 - f. Review proposed code improvements with State Fire Marshal's office and implement agreed upon improvements
 - g. Project permitting
- 4. Accessibility
 - a. Refurbish non-compliant toilet rooms for compliance
 - b. Replace non-compliant doors and door hardware with compliant assemblies
 - c. Replace non-accessible drinking fountains with compliant fixtures
 - d. Refurbish or install new ADA-compliant signage
 - e. Elevator and hall construction to be made compliant
 - f. All new construction to be ADA-compliant
 - g. Create an accessibility plan
- 5. Structural
 - a. Review existing structure
 - b. Complete seismic study
 - c. Review water infiltrations damage
- 6. Mechanical
 - a. Upgrade HVAC System
 - b. Geothermal Heat Pump System
 - c. Cooling Towers, Pumps & Heat Exchangers
 - d. Additional Heating & Cooling
 - e. Ventilation Air System
 - f. Condensate Drains
 - g. Hydronic Piping
 - h. HVAC Controls
 - i. Ductwork and Insulation
- 7. Plumbing
 - a. Below-grade Sanitary Waste Piping
 - b. Below-grade Domestic Water Piping
 - a. Above-grade Sanitary Waste & Vent Piping
 - b. Above-grade Domestic Hot & Cold Water Piping
 - c. Domestic Hot Water Heating System
 - d. Plumbing Fixtures
 - e. Roof Drains & Roof Drain Piping
 - f. Below-grade Storm Water Piping outside building.
 - g. De-Watering Sump Pumps
- 8. Electrical Distribution

- a. Upgrade electrical distribution system.
 - 1) Equipment
 - 2) Feeders
 - 3) Branch Circuits
 - 4) Remove 230V system.
- b. Revise/upgrade existing electrical rooms.
- c. Upgrade grounding system.
 - 1) Grounding ring (counterpoise).
 - 2) Telecommunications system ground.
 - 3) Lightning protection system.
9. Emergency Power
 - a. Provide generator(s).
 - b. Emergency lighting.
 - c. Exit Signage.
 - d. Elevator(s).
 - e. Elevator lighting and controls.
 - f. UPS System
 - 1) Evaluate existing UPS system.
 - 2) Determine requirements for additional UPS power.
10. Lighting
 - a. Energy efficiency.
 - b. Controls.
 - c. Long Life.
 - d. Re-lamping and general accessibility.
 - e. Artwork/museum lighting.
 - f. Historically accurate where required.
11. Telecommunications/Data/Audio-Visual
 - a. Coordinate with State IT Department.
 - b. Remove all exposed cabling.
 - c. New cabling and devices (fiber).
 - d. New concealed pathways.
12. Security
 - a. Security consultant on-board.
 - b. Coordination with State Security/IT/OHP.
 - c. Latest technology.
 - d. Cameras.
 - e. Alarms.
 - f. Screening.
 - g. Command Center.
 - h. Access controls.
 - i. Blue Phones.
13. Fire Alarm
 - a. Current Simplex Addressable System
 - b. Extend to entire building.
 - c. Voice evacuation and Mass Notification capabilities.
 - d. Coordinate with security and access controls.
 - e. Common system and devices throughout.
14. Hazardous Material Abatement
 - a. Identify necessary abatement of asbestos-containing materials
 - b. Coordinate with Owner on Owner's Asbestos Management Plan.
 - c. Identify necessary abatement of lead-based paint
15. Additional items as established during investigations and scope development

16. Protection of Existing Finishes
 17. Protection of Artwork
 18. Phasing Plans
 19. Additional items identified during the Scope Development phase pertaining to the rehabilitation of the interior of the Capitol.
 20. Additional items identified by the Owner to be included in this project pertaining to the interior of the building.
- B. The anticipated scope for this Interior Rehabilitation of the Oklahoma State Capitol construction cost limitation will not exceed Ninety-One Million Six Hundred Thousand Dollars (\$91,600,000) inclusive of all design/build fees.

1.3 PROPOSED SCHEDULE

- A. The following is the proposed schedule for proposal submission, evaluation and award, which may be subject to change:
- | | |
|--|-------------------|
| Issue RFP - Phase II: | January 5, 2015 |
| Pre-Proposal Conference: | January 21, 2015 |
| Last Day to Submit RFI's | January 28, 2015 |
| Final RFI Responses issued by CAP | January 30, 2015 |
| RFP – Phase II Proposal Submittals Due | February 6, 2015 |
| RFP Interviews | February 11, 2015 |
| Contract Award: | February 23, 2015 |
- B. Proposals shall be received before 2:00 p.m. CST on February 6, 2015. There will be no public opening of the proposals.

1.4 PROPOSAL SUBMISSION

- A. Submit responses to
- | | |
|--|--|
| Hand Deliveries: | U.S. Postal Service Deliveries |
| Mr. David Mihm | Mr. David Mihm |
| Construction and Properties Department | Construction and Properties Department |
| Division of Capital Assets Management | Division of Capital Assets Management |
| Office of Management and Enterprise Services | Office of Management and Enterprise Services |
| Will Rogers Office Building | P. O. Box 53448 |
| 2401 N. Lincoln Suite 106 | Oklahoma City, OK 73152-3448 |
| Oklahoma City, OK 73105 | |
- B. Each Design Build firm submitting shall provide one (1) original and five (5) copies of their written responses to be submitted in 8-1/2" x 11" vertically formatted. For Tabs 1 and 2 provide sections tabbed as identified below. Proposers will deliver Tab 3 in a sealed envelope separate from the other Tabs. Refer to Tab 3 description for further information. In addition, each Design Build firm shall submit one electronic color copy of entire submittal (except Tab3) in PDF on a CD-R or thumb drive.

1.5 POINTS OF CONTACTS FOR THE REQUEST FOR PROPOSALS – PHASE II

- A. Point of contact for proposal questions:
- State of Oklahoma:
 Mr. David Mihm
 Construction and Properties Department
 Division of Capital Assets Management
 Office of Management and Enterprise Services
 Will Rogers Office Building

2401 N. Lincoln Suite 106
Oklahoma City, OK 73105
(405) 522-4079 (office)
(405) 521-3789 (fax)
David.mihm@omes.ok.gov

Point of Contact for Technical Questions:
Mass Architects, Inc.
Mr. Duane Mass, AIA or Mr. Michael Tower, AIA
18 W. Park Place
Oklahoma City, OK 73103
(405) 231-1990 (office)
(405) 231-1930 (fax)
duane@massarch.com or mike@massarch.com

1.6 RFP PRE-PROPOSAL CONFERENCE

- A. A mandatory pre-proposal conference will be held on January 21, 2015 at 2:00 p.m. CST at Meeting Room 535 at the Oklahoma State Capitol Building. All offerors and consultants are invited to attend. At least one representative of any Design Build firm proposing must attend. A sign-in sheet will be provided for proposers to validate attendance. The following agenda is furnished for this meeting:
1. Introduction of State Project Team
 2. Review of project and design build process
 3. Review of proposal components
 4. Review of interview process
 5. Review of selection process
 6. Questions and answers
 7. Close

PART 2 - SUBMISSION CONTENTS

2.1 RFP Phase II Table of Contents

- A. The following is the Table of Contents for the proposal response with information that is requested to evaluate proposer's capabilities. The proposal response will need to address the following three components:
1. Past Performance and Relevant Experience
 2. Project Approach
 3. Cost or Fee Basis
- B. The RFP Phase II proposal responses will not be the final opportunity to address these items. The proposal responses will become the basis of the interviews to be held on February 11, 2015. The interviews will cover Tabs 1 and 2 only and will require additional information on these two components be given by the respondents. Detailed examples of relevance, further information on the proposal content and responses to questions from the selection committee will be requested at that time.

RFP Phase II Suggested Table of Contents		
Tab	Category	Award Scoring %
1	Past Performance and Relevant Experience	35%
	Cover letter summary from Design Builder	
	Project Experience	15%
	Specific listing of historic restoration and rehabilitation projects	
	Specific experience with Dept. Of the Interior Preservation and Restoration Standards and Guidelines	
	Specific listing of restoration and rehabilitation design build projects	
	Listing of design-build projects	
	Experience with historic materials and processes	
	Other relevant projects	
	Personnel Experience	10%
	Specific listing on project personnel assignments	
	Project personnel specific involvement and phase percentage	
	Designers of Record relevant experience	
	Construction management personnel's relevant experience	
	Conceptual Estimator's relevant experience with similar projects	
	Specialty consultant's specific relevant project experience	
	Past Performance	10%
	Past client evaluations	
	References for key personnel	
	Past performance in maintaining budgets and schedules	
2	Project Approach	50%
	Specific technical approach with relevant materials and systems	10%
	Specific logistical approach toward this project	10%
	Project approach to estimating and cost management	5%
	Analysis of scheduling and phasing	5%
	Project approach to investigations	5%
	Approach to integration of Owner's Consultant's studies and findings	5%
	Approach to development of project scoping documents with Owner's Project Team	5%
	Approach to Sub-contractor recruitment	5%

3	Cost Basis	15%
	Pre-design scope of work development cost	
	Design Builder’s Fee	

2.2 TAB 1 - Past Performance and Relevant Experience (35% of Award Scoring)

A. This section is meant to provide additional specific information on the individuals comprising the project team that is relevant to this project. The intent for this section is to not be the same as was provided with the Request for Qualification responses. The team members, their roles and their specific duties on this project is to be supported by their experience on similar and other projects.

B. This section should address the following:

1. Project Experience

- a. List all pertinent interior restoration and rehabilitation projects containing historic materials and design features, i.e., plaster partitions, historic doors and hardware, marble flooring, historic ornamentation and similar work. Specifically detail up to three (3) specific projects and explain, in a maximum of one page for each, why these projects illustrate your unique qualifications and the lessons learned from these projects which are applicable to this project.
- b. List a project or explain in detail your experience with and understanding of the National Park Service Preservations standards and how they do or do not apply to this specific project in a maximum of one page.
- c. Provide a list of interior restoration projects completed by team members (designer or contractor) best illustrating techniques and abilities which are applicable to this project. This response should be in the form of a list, stating for each project the type of contract used (i.e. Owner provided, AIA, DBIA, vendor provided) and an Owner contact. Projects performed as design-build projects involving historic restoration or renovation are considered ideal.
- d. Provide a listing of successful design-build projects at or near this budget level, in one page or less. This listing shall demonstrate your team’s specific knowledge of design-build. This listing may apply to designer of record and constructor of record separately.
- e. Provide in one page or less, an example project or projects in which the team, designer or contractor utilized detailed investigations processes to establish a final scope of work for the Owner to use to establish a final project scope and budget.
- f. Provide an example of uniquely staged or phased projects, that allowed a facility to remain operating and in use during renovation or construction processes. Explain, in a maximum of one page, how this project or project’s processes or approach best demonstrates your capabilities for this project.

2. Personnel Experience

- a. Please specifically list the following personnel illustrating their experience addressing the six items illustrated under Project experience:
 - 1. The Lead Design Project Manager for Architecture and Engineering
 - 2. The Pre-Construction Services Manager (specifically focusing on pricing, planning and specific forensic abilities on buildings)

3. The Construction Project Manager
 4. Specialty Design Consultants (Design Consultants with specific abilities on projects of this type).
- b. In addition, provide relevant experience for the following team members:
1. The Site Superintendent
 2. The Cost Estimator and Conceptual Estimator
 3. Lead Design Project Manager
 4. Lead Design Architect
 5. Interior Designer
 6. Lead Engineering Team Project Manager, Specialty Consultant or Lead mechanical, Electrical, Structural, Civil Engineering Team Leaders individually
3. Provide client evaluations for other projects provided on the Design Build team members that provide insight into their performance on those projects. Provide client references for current or completed projects for key personnel who will be assigned to this project provide insight into their performance on those projects. Provide an analysis on Design Builder team members and their past performance on adherence to the original budget and schedule, changes made to the budgets and schedule and reasons for those deviations.

2.3 TAB 2 - Project Approach (50% of Award Scoring)

- A. This project will involve conditions that will require a greater sensitivity and skill on the part of the Design Builder to successfully accomplish this project. The nature and condition of the materials present, the historical nature of the building, the understanding of the underlying conditions evidenced require a special understanding and approach. At the same time, the public nature of this building and its usage and the scale and extents of the project require a significant logistical capability of the respondents. The Owner has engaged a Structural consultant who has performed seismic investigations and is engaged to prepare a report of their findings. This consultant is further tasked with assisting and explaining the criteria used in their findings and, as requested, working with the Owner's Representatives and the Design Builder in an advisory capacity to develop the project scoping documents, which become the basis of the repairs and design portion of this project.
- B. This proposal section is meant to be where the Design Builder can explain in detail their approach to address each of these aspects of the project. Respondent should demonstrate their grasp of the technical aspects of the project execution and how they would staff, manage, schedule and maintain internal control of the project for quality assurance to the State. The responses should address the following:
1. Specific Technical Approach with Relevant Systems or Materials: Respondents will demonstrate their understanding of the technical issues surrounding the project and how their understanding is applied to successfully complete the task of actual restoration. This understanding may explain capabilities in scheduling, cost management, actual technical approach, preparation of scopes of work, budget forecasting, and planning for forensic investigation to establish the scope of work.
 2. Specific Logistical Approach: This response will contain a synopsis of how the respondent intends to complete this project, maintain full operational control and allow the Owner use of the site and of the building. The respondent will address issues such as staging, site issues, safety and security, equipment usage and staging and other similar issues that will be part of the project management. The response will also document how the Design Builder will allow and facilitate access to the work areas by the Owner's Project Team and others authorized by the Owner to access these areas throughout the

project. The Design Builder shall recognize in their response the high public visibility of this project.

3. Project Approach to Estimating and Cost Management: Illustrate the tools you will use to arrive at the proposed initial budget from the scope of work developed and how you will manage the construction costs to maintain the budget.
 4. Analysis of Scheduling and Phasing: Provide a proposed initial schedule and explain relevant scheduling criteria that accommodates the Owner's occupation and operations in the building. The initial schedule should include the completion of the project scope development, design documentation, bidding and construction of the project.
 5. Project Approach to Investigations: Explain how your team's understanding of the investigation process and how you will complete the investigations begun by the Owner's Project Team and integrate the findings into the final scope of work.
 6. Approach to Development of Project Scoping Documents: Explain how your team intends to develop the scoping plan to lessen unintended consequences of finding items outside original scope set by your team. Additionally, demonstrate how the respondent will use his capabilities to ascertain that all work from design through implementation is completed to the highest quality level.
- C. The project will require the development of a Guaranteed Maximum Price (GMP) after award, for review and acceptance by the Owner. The intent is for the Design Builder to develop trade packages that will be bid by sub-contractors or the Design Builder. These bids of the trade packages will become the basis of the GMP with the additional costs for a complete project. This section of the proposal response should contain the Design Builder's approach to the assignment and development of the trade packages and the recruitment of suitable bidders for these packages.

2.4 TAB 3 – Cost Basis (15% of Award Scoring)

- A. Proposers will deliver this Tab in a sealed envelope separate from the other Tabs. The envelope shall be clearly marked as follows:
- “Oklahoma Capitol Restoration – Interior Rehabilitation – RFP Phase II Tab 3, CAP Solicitation #15151DB, DO NOT OPEN”**
- B. The project will require the Design Builder to perform the following:
1. Work with the Owner's Project Team to develop the project scoping documents to sufficient detail (Phase 1) to become the basis of the design and bidding work to be performed by the Design Builder.
 2. The Design Builder will then develop the design and construction documents for bidding the trade packages. These trade packages will be then bid. This work will comprise Phase 2.
 3. These bids, along with the other management, overhead and profit costs, including those of the Design Builder, will become the basis of the GMP.
- C. The cost basis of this proposal will be the costs and fee percentages the Design Builder will contract for performing these services. The costs and fees are anticipated as follows:
1. Scope Development Cost (\$):
 - a. Pre-design scope of work development cost. This portion of the fee is anticipated as a lump sum fee.
 2. Design Fee (%):
 - a. Provide Architect's and Engineer's fees for work commencing from approved Scope Development (Phase 1) through completion of final approved Bidding Documents. This portion of the fee to be a percentage fee. The Design Fee is for contractual information only and is not a basis of evaluation, scoring or ranking.
 3. Design Builder Fee (%):

- a. Design Builder's fee fees including all bidding costs and activities, Designer and Builder Contract Administration and all subsequent construction activities required for successful completion of the agreed upon and approved scope. This portion of the fee is to be as a percentage fee.
- D. The GMP will be developed from the trade packages, their mark-ups, any other self-performed work, management fees, design construction administration costs and other costs to the project deemed appropriate and agreed to by the Design Builder and Owner. This portion of the cost basis for the project is not part of this submittal.

2.5 RESPONDENT INTERVIEWS

- A. The respondent interviews are scheduled to give the review committee time to review the proposal submitted by the three short-listed Design Builders. The interviews are meant to be an opportunity for the Design Builder to offer additional and more specific information tailored to this project. The members of the Design Builder's team who will be effecting the work will be requested to present their qualifications and insight on this project. The Design Builder will also be expected to have completed initial planning for this project to address the specific requirements, scheduling and intricacies of this project. The desire is that the Design Builder present new and insightful information to the selection committee and address anticipated issues that may need resolution by the Owner.
- B. The interview structure will be 45 minutes for design-builder presentations and 30 minutes for questions following the presentation. There is no limit on the number of individuals that attend; however, those that attend should offer value to the process. It is strongly suggested that the Offerors bring those individuals that will be directly working on the project and can address how their specific experience/expertise is relative to our project. The following is further enumeration on points to hit during the presentation:
 - 1. How your past experience will specifically help you in interior repairs to the Capitol.
 - 2. Information about the project team that will be directly involved in this project.
- C. The cost basis submittals will not be part of the interview process. Questions from the selection committee may arise to foster understanding of the proposal response.

2.6 MISCELLANEOUS PROVISIONS

- A. Request for Information (RFI) questions from the Design Builders will be accepted through January 28, 2015. Owner will respond with RFI responses by addenda by January 30, 2015. Acknowledgement of the receipt of these RFI response addenda should be included in proposal responses.
- B. A proposer may deem a question proprietary to their submission. The Design Builder should submit the question to the Owner with a request for review for propriety. The Owner will review and, if deemed proprietary, respond solely to that Design Builder. If Owner deems the question non-proprietary and germane to all proposers, Owner will query original Design Builder whether they would have the response go to all proposers or the Design Builder would rather withdraw the question. Questions deemed non-proprietary will only be responded to all proposers.

END OF SECTION 002211

SECTION 002220 – PROPOSAL EVALUATION

PART 1 - GENERAL

1.1 GENERAL INFORMATION

- A. The Owner will evaluate the proposals in accordance with the evaluation criteria described herein. Price information will be evaluated for fairness, reasonableness as described in this same section.
- B. The pre-proposal conference will be held on January 21, 2015 at 2:00 p.m. CST at Meeting Room 535 at the Oklahoma State Capitol Building. Conference attendance is mandatory for Design Builders wanting to submit a proposal in response to this RFP. Questions will be entertained on the RFP.
- C. Requests for Information (RFI) will be accepted until through January 28, 2015 with the intent to distribute RFI responses by January 30, 2015. Acknowledgement of receipt of the RFI responses must be included in the proposal responses or as part of the subsequent interviews.
- D. Respondent interviews will be held February 11, 2015 to increase the understanding of the Design Builder's RFP responses. The selection committee will make their final proposal evaluations after these interviews.
- E. The Design Build team selection will be announced on February 23, 2015.

1.2 EVALUATION CRITERIA

- A. The evaluation scoring for this RFP process (submission and interview) will be evaluated on the quality of response to the following criteria. The weighting of individual aspects of these first two categories is listed in Section 002211 Proposal Preparation.
 - 1. PAST PERFORMANCE AND RELEVANT EXPERIENCE (35% of award scoring)
 - a. Evaluation of specific listing of projects completed by the team members which have direct relevance to this historic restoration and other restoration and rehabilitation repairs involved in this project.
 - b. Design Builders familiarity and experience with the U.S. Department of the Interior Standards for Restoration, Standards for Reconstruction, Guidelines for the Treatment of Historic Properties, Preservation Briefs and Preservation Tech Notes.
 - c. Past performance with projects of this type or projects of a relevant or similar nature and their success with completion.
 - d. Past performance on projects that was performed utilizing the design-build method.
 - e. Technical criteria listed in the proposed format which would represent the Design Builder's understanding of this project and how previous projects may apply.
 - f. Capabilities and experience of project personnel assigned to this project and relevance to this project.
 - g. Experience of personnel in working together on prior projects and with this project delivery method.
 - h. Level of expertise of project personnel with historic preservation and restoration methods and procedures.
 - i. Specific ability of Design Builder to work with AEI team for oversight and review and specific examples of interaction with similar teams in the Design Builder's work history.
 - j. Past project performance evaluations and references for firms and specific personnel.

- k. Past project performance in maintaining budgets and schedules.
2. PROJECT APPROACH (50% of award scoring)
- a. Respondent should demonstrate their grasp of the technical and logistical aspects of the project and how they would staff, manage, schedule and maintain internal control of the project for quality assurance to the State. The scoring will utilize the following criteria:
 - 1. Design Builder's demonstration of their understanding of the historic materials, the technical repair methods, and the technical criteria that will be utilized on this project.
 - 2. Evaluation of the Design Builder's proposed scope of work development, design, development of trade packages and bidding of packages to develop a Guaranteed Maximum Price.
 - 3. Evaluation of Design Builder's logistical approach to this project, including recommendations on staging, phasing, equipment utilization, material procurement and sub-contractor recruitment.
 - 4. Design Builder's explanation of their estimating procedure for this project and approaches to budget forecasting and cost management.
 - 5. Demonstration of Design Builder's technique for integrating the work of the Owner's Project Team into the scope of work development and construction documents.
 - 6. Managerial approach, including the qualifications of the staff assigned, and why these individuals are specific to this project and how their performance will provide the solutions required for this project.
 - 7. How the Design Builder will use his capabilities to develop a quality assurance and quality control plan to ascertain that all work from design through implementation is completed to the highest level.
3. COST BASIS (15% of award scoring)
- a. The cost basis is the reasonable lump sum or percentages fees for work by the Design Builder to the stage of the project when a Guaranteed Maximum Price (GMP) can be established. Some of the requested fees are mark-ups for the bid work that will become part of the GMP.
 - b. The cost basis pricing will be evaluated and considered. The proposed prices will be analyzed for reasonableness. They may also be analyzed to determine whether they are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the Design Builder's technical proposal.
 - c. The price will be used along with the technical evaluation to make selection for award. Since evaluation of the price proposal will represent a portion of the total evaluation, it is possible that Design Builder might not be selected for award because of unreasonable, unrealistic, or incomplete price proposal information.
 - d. The cost basis has no order of importance. The components of this portion of the work are as follows:
 - 1. Pre-design scope of work development cost. This portion of the fee is anticipated as a lump sum fee.
 - 2. Design fee (%) for work commencing from approved Scope Development (Phase 1) through completion of final approved Bidding Documents. This portion of the fee is to be a percentage fee.
 - 3. Design Builder's fee fees including all bidding costs and activities, Designer and Builder Contract Administration and all subsequent

construction activities required for successful completion of the agreed upon and approved scope. This portion of the fee is to be a percentage fee.

4. The anticipated scope for this Interior Rehabilitation of the Oklahoma State Capitol construction cost limitation will not exceed Ninety-One Million Six Hundred Thousand Dollars (\$91,600,000) inclusive of all design/build fees.

1.3 MISCELLANEOUS PROVISIONS

- A. The RFQ Phase 1 submissions and rankings have no scoring relevance to the evaluations by the selection committee. If information submitted as part of the RFQ Phase I response for the project has changed, the Design Builder shall explain in the RFP Phase 2 submittal why the revision is necessary and shall provide substitute information reflecting the revision.
- B. The intent is for the RFP Phase 2 submissions to build upon the information submitted with the RFQ Phase 1 submissions. The focus of the RFP Phase 2 submissions should be on the aspects of this project that the Design Builder qualifications are best matched to and the Design Builder approach for this project.
- C. The Design Builder interviews will be an important part of the selection process and are focused on better understanding why the Design Builder's team is the best match for this project. Both in qualified personnel and project approach.
- D. The selection committee will evaluate the proposals, after the interviews, against the criteria and assign a numerical score to each category utilizing a weighted criteria method based on the percentages noted above for each category. The scores will be combined to achieve a ranking of the respondents.
- E. The respondent interviews are meant for the selection committee to evaluate the ability and the approach of the Design Builder to this project. The more specific detail that the Design Builder can provide to the selection committee to demonstrate their understanding and prosecution of this project, the more helpful it will be to this evaluation.

END OF SECTION 002220

SECTION 011001 – INTERIOR SCOPE OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Interior Scope list
 - 2. Interior Scope information
 - 3. Interior Scope expectations
 - 4. Work phasing.
 - 5. Use of premises.
- B. Related Sections include the following:
 - 1. Division 01 Section “Performance Specifications” for limitations and procedures for the Project and Project Development.
 - 2. Division 01 Section “Design After Award” for procedures for development and review of the Project Design.
 - 3. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 EXTERIOR PROJECT SCOPE (Not part of this project)

- A. The Exterior Rehabilitation of the Oklahoma State Capitol is an ongoing project and the respondents for the interior project must cooperate and coordinate work to assist the Owner’s Project Team and the exterior project Design Builder wherever possible, provided the assistance does not involve contractual change. The work for that project will involve a complete restoration of the exterior of the Capitol. In summary, the exterior work on the Capitol will include the repairs and rehabilitation to the following elements of the building and adjacent elements:
 - 1. Repairs to granite base and joints
 - 2. Cleaning of limestone stains and repair of limestone spalls on building facade
 - 3. Limestone joint repairs and original anchor refurbishment
 - 4. Restore and repair decorative elements such as limestone griffins, column capitals and roof-top and building ornamentation
 - 5. Repair and repaint cast iron window surrounds and decorative panels
 - 6. Evaluate metal window frames and glazing for repair or replacement. Make chosen repairs or replacement method.
 - 7. Repair and refinish exterior doors and frames, including replacement of hardware with enhanced ADA compliance
 - 8. Replace portions of copper roofing
 - 9. Replace portions of asphaltic roofing
 - 10. Rehabilitation of basement light well walls and improvement of drainage
 - 11. Replace adjacent sidewalks and improve drainage at perimeter of building
 - 12. Repairs to terrace areas, granite steps and granite plaza extensions, including upper level donor pavers at South side between upper building steps and lower site steps

13. Analyze water infiltration at East Tunnel and repair waterproofing at subgrade walls and improve drainage to chosen extents
 14. Civil work associated with repairs to the East Tunnel
 15. Minor mechanical and electrical work associated with the exterior rehabilitation
 16. Additional items identified during the Scope Development phase pertaining to the rehabilitation of the exterior of the Capitol.
 17. Additional items identified by the Owner to be included in this project pertaining to the exterior of the building.
- B. This project and the Exterior Rehabilitation project will have overlaps of work, phasing, and logistical support. The Design Builder for the Interior Rehabilitation will coordinate with the Design Builder of the Exterior Rehabilitation to ensure that both projects proceed smoothly.

1.4 INTERIOR SCOPE LIST

- A. The Interior Rehabilitation of the Oklahoma State Capitol will involve a restoration and rehabilitation of the interior of the Capitol. The Goals and Criteria for this project, as approved and adopted by the State Capitol Oversight Committee, were attached to the Interior Request for Qualifications. This Interior Scope list is based on the Goals and Criteria. The selected Design Build team shall develop the scoping information for this list of improvements and add to the list of the building components needing rehabilitation through the Scope Development phase. A list of the scope items may include, but are not limited to, the following list:
1. Architectural
 - a. Repairs to basement floor.
 - b. Rehabilitate above-grade floors and base
 - c. Rehabilitate walls and ornamentation
 - d. Rehabilitate ceilings and ornamentation
 - e. Re-establish South entry
 - f. Entry improvements
 - g. Doors, frames and hardware
 - h. Stairs, handrails and guardrails
 - i. Follow-on repairs
 - j. Replace elevators
 - k. Signage
 - l. Window treatments
 - m. Develop historic displays
 - n. Additional storage
 2. Improve Historic Aesthetics
 - a. Establish Preservation Zones
 - b. Establish standards for common building elements
 - c. Identify historic lighting
 - d. Enhance mechanical and electrical items
 - e. Refurbish doors, frames and hardware
 3. Life Safety
 - a. Perform a code review
 - b. Identify code deficiencies
 - c. Review and improve exiting
 - d. Extend fire suppression system
 - e. Review and improve fire alarm system

- f. Review proposed code improvements with State Fire Marshal's office and implement agreed upon code improvements
- g. Project permitting
- 4. Accessibility
 - a. Refurbish non-compliant toilet rooms
 - b. Replace non-compliant doors and door hardware
 - c. Replace non-accessible drinking fountains
 - d. Refurbish or install new ADA-compliant signage
 - e. Elevator and hall construction to be made compliant
 - f. All new construction to be ADA-compliant
 - g. Create an accessibility plan
- 5. Structural
 - a. Review existing structure
 - b. Complete seismic study and implement any required repairs
 - c. Review water infiltrations damage
- 6. Mechanical
 - a. Upgrade HVAC System
 - b. Geothermal Heat Pump System
 - c. Cooling Towers, Pumps & Heat Exchangers
 - d. Additional Heating & Cooling
 - e. Ventilation Air System
 - f. Condensate Drains
 - g. Hydronic Piping
 - h. HVAC Controls
 - i. Ductwork and Insulation
- 7. Plumbing
 - a. Below-grade Sanitary Waste Piping
 - b. Below-grade Domestic Water Piping
 - c. Above-grade Sanitary Waste & Vent Piping
 - d. Above-grade Domestic Hot & Cold Water Piping
 - e. Domestic Hot Water Heating System
 - f. Plumbing Fixtures
 - g. Roof Drains & Roof Drain Piping
 - h. Below-grade Storm Water Piping outside building.
 - i. De-Watering Sump Pumps
- 8. Electrical Distribution
 - a. Upgrade electrical distribution system.
 - 1) Equipment
 - 2) Feeders
 - 3) Branch Circuits
 - 4) Remove 230V system.
 - b. Revise/upgrade existing electrical rooms.
 - c. Upgrade grounding system.
 - 1) Grounding ring (counterpoise).
 - 2) Telecommunications system ground.
 - 3) Lightning protection system.
- 9. Emergency Power
 - a. Provide generator(s).
 - b. Emergency lighting.
 - c. Exit Signage.
 - d. Elevator(s).

- e. Elevator lighting and controls.
- f. UPS System
 - 1) Evaluate existing UPS system.
 - 2) Determine requirements for additional UPS power.
- 10. Lighting
 - a. Energy efficiency.
 - b. Controls.
 - c. Long Life.
 - d. Re-lamping and general accessibility.
 - e. Artwork/museum lighting.
 - f. Historically accurate where required.
- 11. Telecommunications/Data/Audio-Visual
 - a. Coordinate with State IT Department.
 - b. Remove all exposed cabling.
 - c. New cabling and devices (fiber).
 - d. New concealed pathways.
- 12. Security
 - a. Security consultant on-board.
 - b. Coordination with State Security/IT/OHP.
 - c. Latest technology.
 - d. Cameras.
 - e. Alarms.
 - f. Screening.
 - g. Command Center.
 - h. Access controls.
 - i. Blue Phones.
- 13. Fire Alarm
 - a. Current Simplex Addressable System
 - b. Extend to entire building.
 - c. Voice evacuation and Mass Notification capabilities.
 - d. Coordinate with security and access controls.
 - e. Common system and devices throughout.
- 14. Hazardous Material Abatement
 - a. Identify necessary abatement of asbestos-containing materials
 - b. Coordinate with Owner on Owner's Asbestos Management Plan.
 - c. Identify necessary abatement of lead-based paint
- 15. Additional Items
- 16. Protection of Existing Finishes
- 17. Protection of Artwork
- 18. Phasing Plans

1.5 INTERIOR SCOPE INFORMATION

A. Scope Information

1. The work described herein outlines the scope of work to be performed by the Design Builder. The first phase of the work, the Scope Development Phase, will involve the Design Builder performing investigations as required to identify the conditions and extents of the items to be addressed in the design and construction phases. During the Design and Bidding phases, the Design Builder will work with the Owner's Project Team to develop the trade packages for bidding that

describe the extents and methods of the repairs based on the final scopes developed and accepted during the Scope Development Phase.

2. The scope information included herein is not a complete list of the items to be reviewed by the Design Builder. The Design Builder and the Owner's Project Team will review additional items to be included.
3. Architectural
 - a. Repairs to the Basement Floor
 - 1) The existing basement flooring has areas where the sub-base was inadequate and subsequent installations of finish materials are cracking and failing. The sub-base in these areas is reported to be asphalt and the flooring and base in these areas is terrazzo. Pipe trenches are present under some of the floor with access points. Existing plumbing replacements may require removal of more of this flooring. The sub-soil may be contaminated due to the sanitary sewer piping deterioration
 - 2) During the Scope Development phase of the project, The Design Builder will inspect the flooring and establish which areas having bad sub-base or have plumbing that will be affected by replacement of plumbing under the existing flooring and establish the extents of the flooring to be replaced and nature of repairs. The repair methodology shall be established to take into account partitions, mechanical, electrical, plumbing systems and other items affected by the replacement of the flooring.
 - b. Rehabilitate above-grade floors and base
 - 1) At all floors, the marble flooring and base in the public areas have experienced wear and staining. At many locations in above-grade floors, cracking in the floor along structural lines and replacement of flooring with non-matching materials have been done.
 - 2) During the Scope Development phase, a review of the extents and methods of repair and cleaning will be established. Recommendations on floor crack repair methods shall be presented to Owner's Project Team. Examples of accepted methods of repairs will be performed and mock-up areas established as model for repairs.
 - c. Rehabilitate walls and ornamentation
 - 1) At all walls in the public areas, the plaster and ornamentation have experienced wear and staining. In some areas, cracking in the walls has been identified. In other areas of the building, the wall composition may be plaster or gypsum board.
 - 2) During the Scope Development phase, a review of the extents and methods of repair and cleaning will be established. Identify areas that will have mechanical and electrical items removed or relocated in the walls and will also require repair. Examples of the repair methods will be performed and mock-up areas established as model areas for repairs. Restoration and matching of the historic character of the building will be required.
 - d. Rehabilitate ceilings and ornamentation
 - 1) At all ceilings in the public areas, the plaster and ornamentation have experienced wear. In other areas of the building, the ceiling composition may be plaster, gypsum board or lay-in

- ceiling. The rehabilitation of the infrastructure and the removal and relocation of mechanical, electrical and data and infrastructure items may require ceiling access.
- 2) During the Scope Development phase, a review of the extents, the condition and repair and cleaning needed will be established. Where lay-in ceilings have been installed in areas of historic nature, a review of the possibility of removal of the lay-in ceilings and restoration of the original ceilings, will be performed. Identify areas that will have mechanical and electrical items removed and will also require repair. Examples of the repairs will be performed and mock-up areas established as model areas for repairs. Restoration and matching of the historic character of the building will be required.
- e. Re-establish South entry
- 1) The existing South entry will be re-established as a public entry. The existing doors and frames will be refurbished and also the removal of the revolving door and replacement with doors in the opening that match the other doors in this frame will be part of the Exterior Rehabilitation project. During Scope Development and Design phases, the methods and development of the security screening procedures and incorporation will be developed with the Owner's Project Team. Design Builder and Owner's Project Team will have to coordinate space requirements. The highly ceremonial nature of this entry will require a unique solution blending with the historical character of this area.
- f. Entry improvements
- 1) The existing building has public entries at the southeast and west sides of the buildings. An entry at the east side is dedicated for public officials. Another entry, not currently utilized, is the east tunnel access at the basement level. This project will require review of these entries and establish better security integration, environmental control, traffic flow and improving the integration into the historic context of the building.
- g. Doors, frames and hardware
- 1) The Historic Conditions Report documented the nature of the doors, frames and hardware discontinuity in the existing building and random nature of the installations and styles.
 - 2) During the Scope Development phase, the Design Builder will document the existing doors and frames. The Design Builder work with the Owner's Project Team to establish standards for the doors, frames and glazing and identify the extent of doors, frames and glazing to be replaced. The Design Builder will document the condition of the door hardware, and then work with the Owner's Project Team to establish the standards for the hardware function and style and the extent of hardware replacement. All hardware will be made to be ADA compliant, except where established to be non-accessible spaces.
- h. Stairs, handrails and guardrails
- 1) During the Scope Development phase, the Design Builder will document the condition of the marble stairs, marble handrails and guardrails and brass handrails. The Design Builder will

- recommend methods of repair and cleaning. Working with the Owner's Project Team, the accepted repair methods will be used to create a mock-up of the repair methods. The accepted mock-up to become the standard to match.
- i. Follow-on repairs
 - 1) The Design Builder will develop strategies for removal of extraneous items such as electrical, data and communication wiring and conduit from the public areas and other important spaces. Design Builder will review these strategies with the Owner's Project Team and develop the extents of repairs during the Scope Development phase based on the approved strategies.
 - j. Replace elevators
 - 1) The existing elevators function poorly and have had finishes installed unsympathetic with the historic nature of the building. The power that supplies the elevators is a 240V open delta system that needs to be replaced with a high efficiency 3-phase power.
 - 2) During the Scope Development phase, the Design Builder will work with the Owner's Project Team to identify the requirements and design for new elevators which are in keeping with the historic character of the building.
 - k. Signage
 - 1) The signage throughout the building is not consistent. During the Scope Development phase, the Design Builder will survey the existing signage and work with the Owner's Project Team to develop appropriate signage standards meeting ADA accessibility requirements.
 - l. Window treatments
 - 1) Numerous interior window treatments are being used at the exterior windows of the original building.
 - 2) The existing dome clerestory window glazing allows damaging light on the paintings and murals below.
 - 3) During the Scope Development phase, the Design Builder will work with the Owner's Project Team to develop standards for window treatments and extents.
 - m. Develop Historic Displays
 - 1) In some areas, such as the first floor rotunda area, the displays are haphazard and not historic in nature. During the Scope Development phase, the Design Builder will work with the Owner's Project Team to develop concepts for displays that are appropriate to the historical nature for this first floor area and other areas and may be used for historical displays appropriate to the Capitol and State of Oklahoma.
 - n. Additional Storage
 - 1) Work with the Owner's Project Team to develop locations that may be developed into storage areas.
4. Improve Historic Aesthetics
- a. Establish, with Owner's Project Team, Preservation Zones for the Capitol that identify the levels of preservation and restoration by floor and area.

- b. Establish standards for common building elements such as signage, exit lights, fire extinguisher enclosures, etc. that reflect the historic character of the building.
 - c. Identify locations to install historic light fixtures in accordance with preservations zones
 - d. Identify locations to install exposed mechanical and electrical items to match and enhance the historic character of the building
 - e. Identify locations to refurbish doors, frames and hardware to standards established with Owner’s Project Team
5. Life Safety
- a. Perform a code review on the building utilizing existing building chapters of the current State of Oklahoma adopted codes and identify code deficiencies and propose remedial solutions
 - b. Review exiting and recommend improvements to stairs, corridors and exit paths where problems exist.
 - c. The existing building has had fire suppression systems installed in a few areas of the Capitol as they have been remodeled. The Design Builder’s will work to establish an implementation strategy for extending a fire suppression system to the portions of the building not currently protected and identify installation method to not detract from the historical character of the building.
 - d. The existing building has two fire alarm panels that serve this building and have connections to other state-owned buildings near the Capitol. Coordinate fire alarm system design to integrate the panels and add features such as mass notification.
 - e. The Design Builder, along with Owner’s Project Team, will develop the proposed life safety improvements to be made to the Capitol and shall meet with the Oklahoma State Fire Marshal’s office to develop a final list of improvements needed acceptable to that office.
 - f. The Design Builder will submit the completed plans and specification to the Oklahoma State Fire Marshal’s office for permitting review, obtain permits and pay any fees associated with obtaining the permits.
6. Accessibility
- a. The Design Builder shall review the existing toilet rooms for non-accessible features in these toilet rooms and propose solutions.
 - b. The Design Builder will survey the existing doors and door hardware and develop a plan for replacing non-compliant doors and door hardware.
 - c. The Design Builder will survey the existing drinking fountains and develop a plan for replacing non-accessible drinking fountains.
 - d. The Design Builder will survey the existing signage and develop a plan for refurbishing or replacing with new ADA-compliant signage
 - e. The Design Builder will review other accessibility issues in the Capitol building and design new construction to address these issues to be ADA-compliant.
 - f. The Design Builder will create an accessibility plan based on accepted improvements.
7. Structural
- a. Review existing structure and identify any additional elements requiring repairs and recommended methods of repair. Several items were

- described in the Historic Conditions Report including brick corbels at the south attic supporting concrete beams and damage to gypsum planks from previous roofing projects.
- b. A seismic study has been performed by the Owner. The study will be provided to the Design Builder for their use. The Design Builder will complete a seismic study, identify options, recommend any remedial measures from the study results and develop the extents for improvements from the measures accepted by the Owner's Project Team.
 - c. Identify nature and extents of repair to structural components damaged by water infiltration.
8. Mechanical – General: The following describes, in general terms, known deficiencies of the existing HVAC Systems and is intended to provide a general guidance only. It shall be the Design-Build Engineers responsibility to perform all required field investigations and analysis for each aspect of the complete and overall HVAC System. The Design-Build Engineer shall be fully responsible for design of new and renovated systems to meet all current Codes and Standards.
- a. Upgrade HVAC System
 - 1) Portions of the existing HVAC System are inadequate or malfunctioning and do not comply with current Codes and Standards.
 - 2) A significant amount of the equipment is outdated and does not meet the current energy efficiency standards.
 - 3) The Design-Build Engineer shall survey/evaluate all aspects of the existing HVAC Systems and shall provide a redesign of the overall systems to conform to the current space requirements.
 - 4) The HVAC Systems shall be upgraded to meet the requirements of ASHRAE Standard 90.1 and ASHRAE 62.2.
 - b. Geothermal Heat Pumps
 - 1) The existing Geothermal Heat Pump System shows signs of wear and disrepair does not meet current energy efficiency standards. Many areas served by the system have undergone space utilization changes.
 - 2) The Design-Build Engineer shall evaluate the existing Geothermal Heat Pump System.
 - c. Cooling Towers, Pumps & Heat Exchangers
 - 1) The existing heating & cooling system is a Hybrid system and requires the Cooling Tower to be in operation at all times. The Cooling Tower, Pumps & Heat Exchanger shows of disrepair, malfunctioning & leaking.
 - 2) The Design-Build Engineer shall evaluate the existing Hybrid System equipment to meet current requirements and demand. The complete system shall comply with current energy efficiency standards.
 - d. Additional Heating & Cooling
 - 1) Design Builder shall evaluate for design for additional Heating & Cooling to serve spaces that are not currently conditioned or have inadequate capacities. Some of the spaces, such as corridors, do not have heating & cooling or have revised usage requirements.
 - e. Ventilation Air System

- 1) Much of the building ventilation is supplied by a dedicated outside air system. Ventilation air supplied to the Heat Pumps is not conditioned. This system shall be fully evaluated for compliance with building capacity requirements and with energy efficiency requirements.
- 2) The existing ventilation air system shall be evaluated for a design to meet current requirements, codes and standards.
- f. Condensate Drains
 - 1) The condensate drain piping serving the existing Heat Pumps is discharged with direct connections to the roof drain stacks. In the event of a collapse of the aging vitrified clay tile storm drain piping during a heavy rain, water could back up into the Heat Pumps.
 - 2) The International Mechanical Code, Chapter 3, requires that all condensate drains be discharged to approved receptors with an indirect connection.
 - 3) The existing condensate drains shall be evaluated for required improvements during the Scope Development phase.
- g. Hydronic Piping
 - 1) The existing hydronic piping shows signs of leakage and corrosion. As the piping degrades and sedimentation builds up in the system, malfunctions will occur. The existing hydronic piping shall be evaluated to meet current demands.
- h. HVAC Controls
 - 1) Proper operation of existing control systems (Control Valves, Dampers, Electronics, etc.) have signs of wear that affects operation of the systems.
 - 2) The controls needs and requirements shall be evaluated to provide a complete and operable system.
- i. Ductwork and Insulation
 - 1) Existing ductwork show signs of leakage and the ductwork insulation show signs of damage due to condensation.
 - 2) The building envelope does not have adequate insulation & vapor barrier.
 - 3) The Design Builder shall evaluate the ductwork and insulation and propose solutions during the Scope Development phase.
9. Plumbing – General: The following describes, in general terms, known deficiencies of the existing Plumbing Systems and is intended to provide a general guidance only. It shall be the Design-Build Engineers responsibility to perform all required field investigations an analysis for each aspect of the complete and overall Plumbing System. The Design-Build Engineer shall be fully responsible for design of new and renovated systems to meet all current Codes and Standards.
 - a. Below-grade Sanitary Waste Piping
 - 1) The below-grade Sanitary Waste piping shows signs of deterioration and leaking. Heavy odors and mold are present in the basement.
 - 2) The existing below-grade Sanitary Waste Piping shall be evaluated for replacement and to meet current demand.
 - b. Below-grade Domestic Water Piping

- 1) The below-grade Domestic Water piping shows signs of deterioration and leaking.
 - 2) The existing below-grade Domestic Water Piping shall be evaluated for replacement and sizing to meet current demand.
 - c. Above-grade Sanitary Waste & Vent Piping
 - 1) The above-grade Sanitary Waste piping shows signs of deterioration and leaking or is degraded or corroded
 - 2) Design Builder shall evaluate system and propose improvements to meet current demands.
 - d. Above-grade Domestic Hot & Cold Water Piping
 - 1) The above-grade Domestic Hot & Cold Water piping shows signs of deterioration and leaking. The piping insulation shows signs of damage and mold due to leaking.
 - 2) Design Builder shall evaluate system and propose improvements to meet current demands.
 - e. Domestic Hot Water Heating System
 - 1) The existing Domestic Hot Water Heating System is outdated and shows signs of wear.
 - 2) The Domestic Hot Water Heating System shall be proposed to meet current demands. The new system shall comply with current energy efficiency requirements.
 - f. Plumbing Fixtures
 - 1) The existing Plumbing Fixtures (Water Closets, Urinals, Sinks, Lavatories, etc.) are outdated and worn.
 - 2) All existing plumbing fixtures (Water Closets, Urinals, Sinks, Lavatories, etc.) shall be evaluated for replacement with low water usage fixtures to meet current Codes and Standards.
 - g. Roof Drains & Roof Drain Piping
 - 1) The existing Roof Drain piping is deteriorated, leaking and causing water damage & mold.
 - 2) All Roof Drain & Roof Drain Piping shall be evaluated for leaking, degradation or corrosion. Design Builder shall propose improvements or replacement.
 - h. Below-grade Storm Water Piping
 - 1) The below-grade Storm Water piping outside of the building is deteriorated and in danger of collapsing. The Roof Drain piping discharges into this piping system.
 - 2) All Storm Water Drain Piping outside the building shall be evaluated and the Design Builder shall provide recommendations for improvements or replacement.
 - i. De-Watering Sump Pumps
 - 1) The existing De-Watering Sump Pumps in the basement are outdated, worn and inadequate to prevent water from migrating into the basement.
 - 2) The existing De-Watering Sump Pumps in the basement shall be evaluated for and the need for additional De-Watering Sump Pumps shall be evaluated to meet requirements to keep the basement dry.
10. Electrical- General: The following paragraphs describe in general terms known deficiencies with the overall electrical system, including distribution, equipment,

grounding, lighting, IT, Fire Alarm, Security, etc. The detailed tasks described are provided as general guidance only. These scoping descriptions are not intended to limit or alleviate the Design-Build Engineer from performing all required code analyses for each aspect of the overall system, whether or not such aspects are specifically identified in this text. The Engineer is fully responsible for designing a new system which complies with all current codes.

11. Electrical Distribution

- a. Upgrade electrical distribution system.
 - 1) The existing electrical distribution system has undergone many revisions since original construction. Therefore the condition of the system varies considerably throughout the building. A great deal of the equipment is most likely antiquated and contains parts which are no longer readily available for maintenance purposes. Equipment is often located in spaces which clearly do not conform to current code requirements related to clear space, working space, egress, etc. Equipment, protective devices, feeder and branch circuit conductors, etc. may not be properly rated. A portion of the original 230V system still exists, serving elevator equipment. Some branch-circuits are known to still include cloth-covered wiring.
 - 2) During the Scope Development Phase the Design Building Engineer shall survey and evaluate all aspects of the existing system and shall establish a re-design of the entire system. The new system shall be coordinated with new architectural layouts and shall fully conform to the current State of Oklahoma adopted version of the National Electrical Code.
- b. Revise/upgrade existing electrical rooms.
 - 1) As stated previously, electrical spaces/rooms in the Capitol do not provide adequate working space, clearances or egress as required by current codes. The new overall system shall be designed to conform to the latest requirements.
 - 2) During the Scope Development Phase the Engineer shall survey all existing electrical equipment locations to determine which do not comply with physical code requirements. It is likely that the re-design of the overall system as well as the re-design of the building architectural elements will dictate the revision of electrical spaces regardless of existing conditions.
- c. Upgrade grounding system.
 - 1) A new grounding system shall be provided for the overall facility. A ground ring/counterpoise shall be provided. A new lightning protection system shall be provided, fully bonded to the overall grounding system. The grounding system shall include required telecommunications systems grounding, coordinated with State IT Department.
 - 2) During the Scope Development Phase the Engineer shall determine extent of new grounding system. Engineer shall work with State IT Department to determine grounding requirements. Engineer shall survey and evaluate the existing lightning protection system to determine required upgrade or replacements. Engineer shall survey existing grounding system

to verify extent of interconnection to new system. All grounding points shall be interconnected.

12. Emergency Power
 - a. Provide generator(s).
 - 1) A new emergency power system, generator back-up, is to be provided for the Capitol. The emergency power system shall include separate automatic transfer switches and distribution systems for legally required and optional systems. As a minimum, the emergency power system shall serve life safety systems such as emergency lighting, exit signs, fire alarm, mass notification, security, access control, OHP Command Center, etc. Optional loads could include the basement computer center, telecommunications rooms, portions of the HVAC system and controls, etc.
 - 2) During the Scope Development Phase the Engineer shall coordinate with the State to verify which portions of the “optional” systems should be powered by the generator(s) and develop the size and requirements for the generator(s).
 - b. Emergency lighting.
 - 1) Emergency lighting shall be provided throughout the spaces as required by current codes. Emergency lighting shall be powered from the new emergency power system.
 - 2) During the Scope Development Phase the Engineer shall coordinate with the Architect and Owner’s Project Team to determine egress routes and shall perform a code review to determine minimal current requirements. Additional emergency lighting requirements shall be determined by coordination with various State personnel/stakeholders.
 - c. Exit Signage.
 - 1) Exit signage shall be provided as required by current codes. Exit signs shall be powered from the new emergency power system.
 - 2) During the Scope Development Phase the Engineer shall work with the Architect and Owner’s Project Team to determine egress routes and shall perform a code analysis to confirm current requirements.
 - d. Elevator(s).
 - 1) Elevators shall be replaced/revised such that 230V is no longer required so that the 230V system can be removed. In addition, emergency power shall be provided to one or more of the elevators as required by current codes. Other elevators should be provided with battery backup and emergency power for lighting and controls. All required interconnections to fire alarm/sprinkler system shall be provided. Revised system also includes elevator shafts and pits.
 - 2) During the Scope Development Phase the Engineer shall coordinate with the Architect and Owner’s Project Team to determine the plan for replacement of the elevators. The Engineer shall perform all required code reviews to determine the most recent requirements pertaining to elevator installation

- including generator backup, fire alarm interconnection, and pit/shaft details.
- e. Elevator lighting and controls.
 - 1) Emergency power or battery backup shall be provided for elevator lighting and controls.
 - 2) During the Scope Development Phase the Engineer shall perform code review to confirm requirements. This work will be coordinated with plans for new elevators, emergency power system, and emergency power for elevators.
 - f. UPS System
 - 1) A large UPS battery room currently exists in the basement IT/Computer Room. This space should be evaluated to determine adequate ventilation, hazardous area ratings (if applicable), fire alarm and suppressions, etc. Additional UPS systems may be desired for other areas of the building. It should be determined whether various UPS systems, existing and new, should be also powered from the new emergency power system.
 - 2) During the Scope Development Phase the Engineer shall perform investigations and code reviews as necessary to determine required modifications to the existing UPS and battery space. The Engineer shall conduct interviews with Owner's Project Team to determine whether additional UPS systems are desired/necessary. The Engineer shall determine the best course of action for overall UPS system installation. Consideration should be given to the use of a flywheel type UPS system, in order to eliminate the use of batteries. This application however will only provide a few seconds backup and will require interconnection to the emergency generator.
13. Lighting: New lighting shall be provided throughout the facility.
- a. Energy efficiency.
 - 1) The new lighting system shall be energy efficient. Lighting Power Density shall conform with ASHRAE 90.1-2007 (or with the latest code accepted by the State of Oklahoma). Consideration shall be given to the use of LED lighting.
 - 2) During the Scope Development Phase the Engineer shall determine lighting requirements based on applicable energy code, and shall determine the most efficient lighting system considering energy efficiency, illumination, re-lamping, maintenance, controls, etc.
 - b. Controls.
 - 1) Lighting controls shall be provided for all spaces in accordance with ASHRAE 90.1-2007 (or with the latest code accepted by the State of Oklahoma). Programmable lighting control system shall be provided for common areas, exterior lighting, etc. Scene-based lighting controls and dimming shall be provided for Senate and House Chambers. Other areas such as conference rooms, training rooms, etc. shall be evaluated for scene-based lighting controls. All lighting control systems shall be integrated such that common control is possible. Daylight harvesting is not desired in admin spaces but may be considered in other areas.

- 2) During the Scope Development Phase the Engineer shall perform a review of the energy code to determine requirements for lighting controls. The Engineer shall coordinate with the Owner's Project Team to determine the best types of systems for high-profile areas such as the Senate and House Chambers. The Engineer shall evaluate various lighting control system types to determine the recommended system for the Capitol.
 - c. Long Life.
 - 1) The new system shall be low maintenance, and shall provide long lamp life.
 - 2) During the Scope Development Phase the Engineer shall investigate various lighting systems to determine the best value considering lamp life.
 - d. Re-lamping and general accessibility.
 - 1) The new lighting system shall be accessible for re-lamping or means shall be provided for accessibility. Areas such as the Capitol Dome and the skylights over corridors are not currently accessible for re-lamping and maintenance.
 - 2) During the Scope Development Phase the Engineer shall investigate the existing conditions to further identify problem areas. The Engineer shall coordinate with the Architect and Owner's Project Team to determine the best means for alleviating this maintenance issue in the new design.
 - e. Artwork/museum lighting.
 - 1) Provide lighting and lighting control systems which are compatible with the museum areas and the artwork which is displayed throughout the Capitol.
 - 2) During the Scope Development Phase the Engineer shall verify all areas which require this type of specialty lighting, and shall determine the most appropriate lamping and controls for these areas.
 - f. Historical.
 - 1) Many areas of the building are historic in nature. Therefore it will be necessary to design retrofits for existing light fixtures in these areas. Otherwise new historically accurate light fixtures must be provided. These renovated and new fixtures shall be energy efficient, provide long lamp life, and shall be accessible and easily maintainable.
 - 2) During the Scope Development Phase the Engineer shall coordinate with the Architect and Owner's Project Team to determine which areas of the building are historically important. The Engineer shall perform a survey to determine which fixtures must be retrofit and shall evaluate how this is to be accomplished. Where fixtures are not to be retrofitted, the Engineer shall work with the Architect to find appropriate new fixtures.
14. IT/Data/AV
- a. Coordinate with State IT Department.
 - 1) The Owner has developed their desired performance for a new IT infrastructure within the Goals and Criteria document. The

- selected vendor shall fully cooperate and coordinate with the Owner's representatives and personnel to further develop this criteria.
- 2) A new Telecommunications/Data/AV system shall be provided for the Capitol, complete. Cabling, devices, racks, and all other equipment will be provided and installed by the State IT Department. The DB design will include all required pathways, boxes, conduit, cable trays, etc.
 - 3) During the Scope Development Phase the Engineer shall coordinate with the State IT Department to verify all owner-related requirements.
- b. Remove all exposed cabling.
 - 1) Exposed cabling exists throughout the facility. All exposed cabling shall be removed.
 - 2) During the Scope Development Phase the Engineer shall perform a field survey to determine all exposed cables and shall develop a methodology for removing/relocating/concealing all cables.
 - c. New concealed pathways.
 - 1) All new pathways shall be concealed.
15. Security
- a. Planning and development of Owner's goals for a security plan and implementation of this plan will require the Design Builder to work with the Owner's Project Team to develop this plan and establish the best methods for implementation of this work during the design and construction process.
 - b. Security consultant
 - 1) The DB team is to include a security consultant.
 - 2) The Engineer shall coordinate with the security consultant to provide all required rough-in (conduit, boxes, etc.) for the new security system.
 - c. Coordination with State Security/IT/OHP.
 - 1) The Engineer and security consultant shall also coordinate with the State Security Department/Oklahoma Highway Patrol to determine all requirements.
 - d. Latest technology.
 - 1) The new system shall include the entire facility and shall be the latest technology.
 - e. Cameras.
 - 1) Security cameras shall be provided throughout the interior and exterior. Locations shall be determined by the security consultant and the OHP. Equipment shall be specified by the security consultant and the OHP. The Engineer shall coordinate with both for required power and rough-in.
 - f. Alarms.
 - 1) An alarm system shall be provided throughout the building as required by the security consultant and the OHP. Equipment shall be specified by the security consultant and the OHP. The Engineer shall coordinate with both for required power and rough-in.
 - g. Screening.

- 1) Screening areas are to be added. Existing screening areas are to be updated. This work will be developed by the security consultant in concert with the OHP. The Engineer shall coordinate with both for required power and rough-in.
- h. Command Center.
 - 1) The command center shall be enlarged and updated.
 - 2) The Engineer shall work with the Architect, security consultant, Owner's Project Team and OHP to provide power and rough-in for the new command center. The command center will include a central location for all system monitoring such as fire alarm, security, access control, cameras, mass notification, generator controls, etc. Panels shall be located in a separate space, with monitoring only in the command center. Consideration should also be given to providing monitoring/control in this space for lighting, BMS, UPS, etc.
- i. Access controls.
 - 1) A new access control system shall be provided for the Capitol.
 - 2) The Engineer shall work with the architect, security consultant, Owner's Project Team and OHP to provide all required rough-in and power for the new access control system.
- j. Blue Phones.
 - 1) Emergency access "blue phones" shall be provided throughout the site.
 - 2) The Engineer shall coordinate with the Owner's Project Team and OHP and site-related work for blue-phone requirements.
16. Fire Alarm
 - a. Current Simplex Addressable System
 - 1) Work is currently underway to provide and install a new fully addressable Simplex fire alarm system for the building. However, this installation does not encompass the entire building. A fully addressable fire alarm system shall be provided in accordance with current codes for the entire facility.
 - 2) During the Scope Development Phase the Engineer shall determine which areas of the building will not be addressed by the current project. The Engineer shall coordinate with Simplex to develop a plan of action for upgrade of the entire facility. The Engineer shall perform all required code analyses pertaining to this upgrade.
 - 3) The Design Builder will submit the completed plans and specification to the Oklahoma State Fire Marshal's office for permitting review, obtain permits and pay any fees associated with obtaining the permits.
 - b. Extend to entire building.
 - 1) Fire alarm system shall include the entire facility.
 - 2) During the Scope Development Phase the Engineer shall survey the facility and shall coordinate with Simplex and Owner's Project Team to verify the extent of the ongoing project. The Engineer shall also coordinate with the Architect and Owner's Project Team to determine areas of modification required to the newly installed (ongoing) system.

- c. Voice evacuation and Mass Notification capabilities.
 - 1) The system shall include voice evacuation and shall incorporate Mass Notification. Separate color strobes (amber) shall be provided for MNS.
 - 2) During the Scope Development Phase the Engineer shall coordinate with Simplex and Owner's Project Team to determine the best method for providing voice evacuation and mass notification for the facility.
 - d. Coordinate with security and access controls.
 - 1) The system shall be fully coordinated with security and access control systems.
 - 2) During the Scope Development Phase the Engineer shall coordinate with the security consultant, Architect, the Owner's Project Team and OHP to determine the extent of rough-in and power required for security and access control systems.
 - e. Common system and devices throughout.
 - 1) Common devices shall be provided throughout the building. All non-compatible devices shall be removed.
 - 2) During the Scope Development Phase the Engineer shall perform a survey and shall coordinate with Simplex and Owner's Project Team to determine all areas where devices must be replaced/removed so that common systems and devices may be provided throughout.
17. Hazardous Material Abatement
- a. Identify asbestos-containing materials at locations affected by construction and abatement.
 - b. Identify locations of potential asbestos-containing material and work with Owner's Project Team to establish a management plan.
 - c. Identify lead-based paint on materials at locations affected by construction and abate.
18. Additional Items
- a. During the site investigations, additional items may be identified necessary to the proper restoration of the interior of the Capitol. These items may be added in any of the design phases of the project. Every effort should be made during the Scope Development phase to identify these type items.
 - b. The Owner may wish to add other items that will aid with the overall restoration and rehabilitation project that may require work on the exterior to be coordinated with other work anticipated for the Capitol. Every effort should be made during the Scope Development phase to identify these type items.
19. Protection of Existing Finishes
- a. The Design Builder will develop methods for protecting the existing finishes to remain and review them with the Owner's Project Team.
20. Protection of Artwork
- a. Artwork in the Capitol, where possible, will be relocated by the Owner during construction. Some artwork, such as the rotunda murals cannot be relocated. The Design Builder will work with the Owner's Project Team to develop methods to protect this artwork during construction.

The Design Builder will be responsible for implementing the methods accepted by the Owner's Project Team prior to any construction that may affect that artwork.

21. Phasing Plans

- a. The Owner's occupancy requirements for the Capitol will require that the interior rehabilitation be performed in multiple phases. As part of the Scope Development Phase, the Design Builder and the Owner's Project Team will jointly develop the phase sequencing and the areas that will be incorporated in each phase. The Design Builder will be prepared to discuss the cost and logistical requirements associated with each option for phasing. After acceptance of the phasing by the Owner, the Design Builder will integrate the approved phasing plans with the development of the trade packages during the Design and Bidding phases.
- B. The Design Builder will work with the Owner's Project Team to develop the overall scope for the interior rehabilitation of the Capitol and provide estimates and options for review by the Owner's Project Team. The estimate of the work may exceed the defined budget and the Design Builder will work with the Owner's Project Team to refine the scope that will be carried forward into design.
- C. The Owner's Project Team will require time for review of the scope, costs and phasing developed during the Scope Development phase. The Design Builder shall allow a month for this review. During this review period, the Design Builder will aid the Owner's Project Team in the evaluation of options that may be included in the final scope. From the completed review by the Owner's Project Team of the initial scope development documents, the Design Builder will then update the final scope development document and revise the budget, schedule and phasing plans to match the final scope chosen.
- D. The Design Builder shall include in their project scheduling time for reviews by entities such as the Oklahoma State Fire Marshal's Office for reviews and permitting and the City of Oklahoma City for any utility connection reviews or permitting, if included in the scope of work.
- E. The Design Builder will develop and design all of the items in the final interior scope accepted by the Owner and create trade packages for sub-contractor bidding.
- F. The Design Builder will then perform all bidding and construction services.

1.6 INTERIOR SCOPE EXPECTATIONS

- A. The interior scope of work items are listed as items that the Owner wants to address as part of the interior restoration of the Capitol. With each item is an expected outcome of the work and the final appearance or condition of each. These outcomes will be further defined as part of the Scope Development phase. Included herein are preliminary expectations for each item. The final determination of the outcome expectations should be based on best practices.
- B. Repair methodology will be to the highest commercial grade and historically appropriate standards.
- C. All repairs will be in conformance with the practices recommended by the National Park Services Preservation Briefs and Standards for restoration and rehabilitation.
- D. Early in the project, the development of an area or areas to serve as mock-up for standards of quality will be developed to base the work on the project.

E. Work Item Expectations

1. Architectural

a. Repairs to basement floor.

- 1) Abatement of contaminated sub-soils and hazardous materials in areas of construction will be performed. All new plumbing installed shall be coordinated with installations of flooring and other construction to minimize impact on operations in the building. New sub-base to be installed to proper compaction densities and a new level concrete slab installed.
- 2) At locations with stone flooring and base where new slab is installed, stone flooring and base will be removed by method to not cause damage, cleaned by appropriate method and reinstalled. Stone flooring and base at locations to remain in place, will be repaired at damaged locations and cleaned by methods that does not cause damage. Stone flooring will be repaired and cleaned to restore as best possible unblemished finish.
- 3) At locations with other type flooring and base, new materials will be installed based upon decisions made during design phases. Materials will compliment other finishes and be in character with preservation zones and appropriate historic finishes.

b. Rehabilitate above-grade floors and base

- 1) Stone flooring and base, will be repaired at damaged locations and cleaned by methods that does not cause damage. Stone flooring will be repaired and cleaned to restore as best possible unblemished finish.
- 2) Innappropriate and mismatched flooring and base to be replaced with materials that match restored historical flooring and base.

c. Rehabilitate walls and ornamentation

- 1) Partitions and ornamentation affected by repairs will be rehabilitated to pristine condition with appropriate materials and by method in conformance with historic building restoration standards and preservation zones.
- 2) All other partitions and ornamentation will be restored to pristine condition with appropriate materials and by method in conformance with historic building restoration standards and preservation zones.

d. Rehabilitate ceilings and ornamentation

- 1) Ceilings and ornamentation affected by repairs or relocation of infrastructure will be rehabilitated to pristine condition with appropriate materials and by method in conformance with historic building restoration standards and preservation zones.
- 2) Other historic ceilings and ornamentation will be restored to pristine condition with appropriate materials and by method in conformance with historic building restoration standards and preservation zones.
- 3) At locations possible where non-historic ceilings have been installed, historic ceilings will be restored to a pristine condition

- with appropriate materials and by method in conformance with historic building restoration standards and preservation zones.
- 4) At other locations, ceilings will be repaired or replaced to match standards established during the design phase. Ceilings will be restored to a “like new” condition.
- e. Re-establish South entry
- 1) Exterior doors installed to match appearance determined by Owner’s Project Team as original appearance.
 - 2) New partitions or divider systems shall be installed to accommodate traffic flow, queuing space and incorporate security features and security equipment in a manner that compliments and maintains the historic character of the stair area. As much as possible, retain the visibility and open feel of the grand stairs.
- f. Entry improvements
- 1) New partitions or divider systems shall be installed to accommodate traffic flow, queuing space and incorporate security features and security equipment in a manner that compliments and maintains the historic character of the stair area.
- g. Doors, frames and hardware
- 1) Doors not conforming with standards established for preservation zones will be replaced with appropriate new doors. Doors to remain will be restored to “like new” condition and finish.
 - 2) Hardware will be replaced with hardware appropriate to current functions and meeting accessibility standards that resemble the original hardware design to extents possible. Design Builder will work with Owner’s Project Team to establish hardware standards. Hardware to be the highest commercial standards in finish to match existing incorporating the appropriate security requirements of the Owner.
 - 3) At locations identified in the preservations zones, hardware will incorporate the Oklahoma seal similar to existing hardware.
- h. Stairs, handrails and guardrails
- 1) The marble stairs, handrails and guardrails shall be restored to match accepted mock-up. Brass handrails shall be cleaned and restored as close as possible to “like new” condition or replaced with new to match current configuration or accepted configuration meeting current codes.
- i. Follow-on repairs
- 1) At repair locations where mechanical, electrical or other upgrades have been made, repair materials and finishes to level that hides the repair with materials and finishes that match adjacent materials and finishes.
- j. Replace elevators
- 1) Install new elevators with appropriate controls and hall signals to meet accessibility standards and optimize operation efficiency. Cab and door finishes to match historically appropriate finishes and appearance. Capacities of replacement elevators will be the same as current elevators.

- k. Signage
 - 1) The directional and informational signage shall be consistent, meet accessibility standards, have a design in keeping with the historical character of the building and, where identified as needed, be changeable to adapt to occupant changes.
- l. Window treatments
 - 1) Implement and install uniform window treatments at all exterior windows.
 - 2) Implement chosen repair method for windows and clerestories to reduce direct and ultraviolet light to prevent damage to artwork.
- m. Develop historic displays
 - 1) Construct and install historical displays at first floor rotunda and other areas identified during Scope Development and Design phases.
- n. Additional storage
 - 1) Implement design decisions and develop new storage areas, where possible, with new finishes.
- 2. Improve Historic Aesthetics
 - a. The Design Builder will work with the Owner's Project Team to develop the Preservation Zones for the Capitol and then, based on these zones, implement the design standards developed during the Scope Development and Design Phases for all of the common building elements to conform with and reflect the historic character of the building.
- 3. Life Safety
 - a. The Design Builder will work with the Owner's Project Team and the State Fire Marshal's office and develop and implement the code and life safety improvements accepted and approved with the rehabilitation of the interior.
 - b. The fire suppression system will be extended to cover the entire building. Areas determined during design to be required as dry pipe systems will be implemented in that manner. Other areas will be wet pipe systems.
 - c. The fire alarm system will be consolidated and upgraded, as necessary, to be a fully addressable system with mass notification and emergency communications. Notification devices will have two visible notification appliances to signal both fire and hazards or threats.
- 4. Accessibility
 - a. The Capitol will be, to the extents possible, fully accessible with toilet rooms, doors and hardware, drinking fountains, signage and elevator components compliant.
- 5. Structural
 - a. Repair any structural items identified by the Design Builder review and repair any items or adjacent constructed affected.
 - b. The Design Builder will implement the seismic remediation measures identified by the seismic analysis and repair any items or adjacent constructed affected.
 - c. All structure damaged by water infiltration will be repaired after water infiltration locations are remediated.

6. Mechanical
 - a. Upgrade HVAC System
 - 1) The existing HVAC Systems are to be evaluated & upgraded to provide sufficient heating & cooling to meet current/ revised space utilization requirements.
 - 2) The upgraded HVAC System shall comply with current Building Codes and meet the standards of ASHRAE 90.1 and ASHRAE 62.2.
 - b. Geothermal Heat Pump System
 1. The existing Geothermal Heat Pump System shall be evaluated and upgraded to meet current/ revised space utilization requirements.
 2. All worn and outdated equipment shall be replaced as required with equipment that meets current energy efficiency requirements of ASHRAE 90.1
 - c. Cooling Towers, Pumps & Heat Exchangers
 - 1) The existing equipment/system is to be evaluated and upgraded to meet current demand.
 - 2) All worn and outdated equipment shall be replaced as required with equipment that meets current energy efficiency requirements of ASHRAE 90.1
 - 3) Replacement equipment shall be in multiple units to provide the ability to shut down a unit for maintenance or repair.
 - d. Additional Heating & Cooling
 - 1) Additional heating & cooling is to be added to areas currently not conditioned or that has inadequate capacities.
 - 2) All new equipment shall meet the current energy requirements of ASHRAE 90.1.
 - e. Ventilation Air System
 - 1) The existing Ventilation Air System/Equipment is to be evaluated and upgraded to meet current/ revised demand.
 - 2) The new systems and equipment shall meet the standards of ASHRAE 90.1 and ASHRAE 62.2
 - f. Condensate Drains
 - 1) All condensate drain piping that is degraded/ corroded or leaking shall be replaced/ upgraded.
 - 2) Condensate drain piping shall be discharged to approved receptors with indirect connections.
 - g. Hydronic Piping
 - 1) Hydronic piping that is degraded/ corroded or leaking shall be replaced/ upgraded.
 - 2) Hydronic piping shall be back flushed to remove all sediment.
 - h. Controls
 - 1) Existing Control Systems shall be evaluated for proper operation and upgraded as required.
 - 2) All systems shall be Tested and Balanced by a TAB Firm that is Certified by AABC, NEBB or TABB.
 - i. Ductwork and Insulation
 - 1) The existing ductwork shall be pressure tested and repaired or replaced as necessary.
 - 2) Existing insulation that is damaged shall be replaced.

- 3) Proper insulation & vapor barrier is to be provided for the building envelope.
7. Plumbing
- a. Below-grade Sanitary Waste Piping
 - 1) Below-grade Sanitary Waste piping is to be upgraded/replaced.
 - 2) The piping shall be sized to meet current/revised demand.
 - b. Below-grade Domestic Water Piping
 - 1) Below-grade Domestic Water piping is to be replaced to prevent future damage due to leaking.
 - 2) The piping is to be sized to meet current/revised demand.
 - c. Above-grade Sanitary Waste & Vent Piping
 - 1) Above-grade Sanitary Waste & Vent piping that is leaking or deteriorated, is to be replaced to prevent future damage due to leaking.
 - 2) The piping is to be sized to meet current/revised demand.
 - d. Above-grade Domestic Hot & Cold Water Piping
 - 1) Above-grade Domestic Hot & Cold Water piping that is leaking or deteriorated is to be replaced to prevent future damage due to leaking and to prevent mold.
 - 2) The piping is to be sized to meet current/revised demand.
 - e. Domestic Hot Water Heating System
 - 1) The Domestic Hot Water Heating System is to be replaced and sized to meet current/revised demand.
 - 2) The equipment is to be replaced with equipment that meets current energy efficiency requirements.
 - f. Plumbing Fixtures
 - 1) The existing Plumbing Fixtures (Water Closets, Urinals, Sinks, Lavatories, etc.) are to be replaced with low water usage fixtures that meet current Codes and Standards.
 - g. Roof Drains & Roof Drain Piping
 - 1) The roof drains & roof drain piping is to be upgraded/replaced to prevent future damage due to leaking and mold.
 - h. Below-grade Storm Water Piping Outside Building
 - 1) The below-grade storm water piping outside of the building is to be replaced.
 - 2) The existing vitrified clay tile piping is to be replaced with a more modern/durable material.
 - i. De-Watering Pumps
 - 1) The De-Watering Sump Pumps are to be upgraded.
 - 2) Additional Sump Pumps are to be added as required to keep water from migrating into the basement.
8. Electrical Distribution
- a. The overall electrical distribution system shall be upgraded to meet current code requirements. At a minimum the following will be evaluated and upgraded:
 - 1) Equipment
 - 2) Feeders
 - 3) Branch Circuits
 - 4) Remove 230V system.

- b. All electrical rooms and equipment spaces will be revised to meet current requirements pertaining to clearances, work space and egress.
 - c. The grounding system will be upgraded.
 - 1) A grounding ring (counterpoise) will be provided.
 - 2) Telecommunications system grounds will be bonded to the overall building grounding system.
 - 3) The lightning protection system will be upgraded and will be bonded to the overall grounding system.
9. Emergency Power: The building will be provided with an emergency power system.
- a. A generator or generators will be provided with all required automatic transfer switches and associated distribution system.
 - b. Emergency lighting will be provided throughout in accordance with current codes.
 - c. Exit Signage will be provided throughout egress routes.
 - d. Elevator(s) will be powered from the emergency system as required by current codes. Other elevators will be provided with battery backup if not emergency power.
 - e. Elevator lighting and controls will be powered from the emergency system.
 - f. UPS System
 - 1) The existing UPS system will be evaluated for compliance with environment regulations and will be upgraded as required.
 - 2) New/additional UPS systems will be provided as defined by owner expectations and requirements
10. Lighting: New lighting will be provided for the entire facility.
- a. Lighting will be energy efficient and will comply with lighting power density requirements defined by current state adopted energy code.
 - b. Lighting controls will be provided as required by energy code. Additional controls will be provided for common areas, exterior, Senate and House Chambers, conference rooms, etc.
 - c. Lighting system will provide long-life (lamp hours).
 - d. Lighting systems will provide method for re-lamping and general accessibility.
 - e. Artwork/museum lighting will be provided.
 - f. Lighting will be historically accurate.
11. Telecommunications/Data/Audio-Visual: New system will be provided throughout.
- a. Systems will be coordinated with State IT Department.
 - b. There will be no exposed cabling.
 - c. All new cabling and devices (fiber) will be provided.
 - d. New concealed pathways will be provided.
12. Security: New systems will be provided throughout.
- a. The system will be designed and coordinated by a security consultant.
 - b. Design and installation will be coordinated with State Security/IT/OHP.
 - c. The new systems will be the latest technology.
 - d. New security cameras will be provided.
 - e. New alarms will be provided.

- f. Updated screening areas will be provided. Additional screening areas will also be provided.
 - g. The command center will be enlarged and updated.
 - h. A new access control system will be provided.
 - i. Blue Phones will be provided throughout the site.
13. Fire Alarm
- a. The current Simplex Addressable System will be expanded to encompass the entire facility.
 - b. Voice evacuation and Mass Notification capabilities will be provided.
 - c. The fire alarm system will be coordinated with security and access controls.
 - d. The system will provided common devices throughout.
14. Hazardous Material Abatement
- a. Abate asbestos-containing materials at locations affected by construction.
 - b. Aid Owner with updating asbestos management plan.
 - c. Abate lead-based paint on materials at locations affected by construction.
15. Additional Items
- a.
16. Protection of Artwork
- a. The protection of the artwork will remain in place to protect the artwork that cannot be relocated throughout all of the phases of reconstruction. The protection will be in keeping with atr conservation practices. All protection will be removed at the end of construction in manner to not damage artwork.

1.7 WORK PHASING

- A. The work under this contract will require phasing of the construction work that will be tied to the Owner's occupancy requirements. During the Scope Development phase, the Design Builder and Owner's Project Team will develop a detailed phasing schedule balancing the Owner's occupancy and the logistics of construction.
- B. The Design Builder shall propose any sequencing of the Construction phase of the work that they believe best for the Project. The intent of all proposed construction phasing shall be to expedite the work while minimizing the interruption of the activities and operation occurring at the Capitol. Construction phasing may be considered by building element or material repair. The Owner will review and authorize or propose amendments to any proposed phasing before construction may proceed.
- C. Before commencing each phase, submit a detailed schedule showing the sequence, commencement and completion dates. Design Builder shall identify any effect on access by Owner's personnel and the public for all phases of the Work.

1.8 USE OF PREMISES

- A. The Design Builder and the Owner's Project Team will establish the site construction limits and phasing during the Scope Development phase and further define limits during the design phases.
- B. Use of Site: Limit use of premises to areas within the Contract limits agreed upon. Do not disturb portions of Project site beyond areas of Work without permission of the Owner's Project Team.

1. Limits: Confine constructions operations to areas of work and other areas agreed by the Owner for Design Builder use during each phase.
 2. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
 3. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during the construction period.

1.9 OWNER'S OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits, unless otherwise indicated.
1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.
1. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied before Owner occupancy.
 2. Obtain a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
 3. Before partial Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of building.
 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of building.

1.10 WORK RESTRICTIONS

- A. On-Site Work Hours: Work shall be generally performed inside the existing building during normal business working hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, except otherwise indicated.

1. Weekend Hours: Upon approval of Owner and coordination with security personnel.
 2. Early Morning Hours: Upon approval of Owner and coordination with security personnel.
 3. Hours for Utility Shutdowns: Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
 4. Hours for noisy activity: Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations. Upon approval of Owner and coordination with security personnel.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
1. Notify Owner's Project Team not less than three days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Owner's written permission.
- C. Nonsmoking Building: Smoking is not permitted within the building or on the grounds.

1.11 UNIT PRICES

- A. A list of unit prices will be developed by the Design Builder and Owner's Project Team during the Scope Development phase of the project. The unit prices items will be bid with the packages to be bid by the subcontractors. The unit prices will included with the Guaranteed Maximum Price amendment to the contract.

1.12 WARRANTIES

- A. Design-Builder agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Section 2.9 of the General Conditions for Design-Build Contracts (DB535), within a period of five (5) years from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011001

SECTION 011002 – PERFORMANCE SPECIFICATIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:

1. Project Information
2. Type of the Contract.
3. Work phases.
4. Work under other contracts.
5. Owner-furnished products.
6. Use of premises.
7. Owner's occupancy requirements.
8. Work restrictions.
9. Specification formats and conventions.

- B. Related Sections include the following:

1. Division 01 Section "Interior Scope of Work" identification of items to be included in the interior scope of work.
2. Division 01 Section "Design After Award" for procedures for development and review of the Project Design.
3. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 Project Information

- A. Project Identification: Oklahoma Capitol Restoration – Interior Rehabilitation

1. Project Location: Oklahoma City, OK

- B. Owner: State of Oklahoma

1. Project Coordinator: Mike Jones
Construction and Properties Department
Division of Capital Assets Management
Office of Management and Enterprise Services
Will Rogers Building
2401 N. Lincoln, Suite 106
Oklahoma City, OK 73105-4402

- C. Project Team

1. Capitol Architect/AE1: Duane Mass, AIA
Mass Architects, Inc.
18 West Park Place
Oklahoma City, OK 73103
2. Seismic Consultant: Kevin Bahner, P.E.
Wallace Engineering Structural Consultants, Inc.
120 E. Sheridan Ave., Suite 104
Oklahoma City, OK 73104

- D. The Project includes the restoration and rehabilitation of the interior of the Oklahoma State Capitol.
- E. After selection, the Design Builder will work with the Owner's Project Team to further the investigations and develop the project scoping documents. These project scoping documents will become the basis for the design for those portions of the work.
- F. From the completed Scope Development documents, the Design Builder will prepare a preliminary budget, schedule and phasing plan.

1.4 TYPE OF CONTRACT

- A. Project will be constructed under a single design-build contract for design and construction. The Design Builder will design the project to prepare trade packages for bid by subcontractors and then prepare a Guaranteed Maximum Price.
- B. The Design Builder will bid trade packages to sub-contractors and prepare a Guaranteed Maximum Price.

1.5 WORK PHASES

- A. The work under this contract will consist of three main phases: Project Scope Development phase, Design and Bidding Services phase and the Construction phase.
- B. The Design Builder shall propose any sequencing of the Construction phase of the work that they believe best for the Project. . The intent of all proposed construction phasing shall be to expedite the work while minimizing the interruption of the activities and operation occurring at the Capitol. Construction phasing may be considered by building element or material repair. The Owner will review and authorize or propose amendments to any proposed phasing before construction may proceed.
- C. The Design Builder shall build into their schedules and allow for in their proposal, the Owner's review time for each phase and design review. The Design Builder shall allow for up to a month review time at the conclusion of each phase and the first design review.
- D. Before commencing each phase, submit a schedule showing the sequence, commencement and completion dates. Design Builder shall identify any effect on access by Owner's personnel and the public for all phases of the Work.

1.6 WORK UNDER OTHER CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.
- B. The schedule of the work on the exterior rehabilitation of the Capitol will probably overlap the schedule for this project. The Design Builder for that project will be required to cooperate fully with the Design Builder for this work.
- C. Future Work: Owner may award separate contract(s) for other work to be performed at site during the timeframe of this project.

1.7 USE OF PREMISES

- A. Use of Site: Limit use of premises to areas within the Contract limits agreed upon with the Owner's Project Team for each portion of the work. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
 - 2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.

- b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

- B. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

1.8 OWNER'S OCCUPANCY REQUIREMENTS

- A. Full Owner Occupancy: Owner will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits, unless otherwise indicated.
 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.9 WORK RESTRICTIONS

- A. On-Site Work Hours: Work shall be generally performed inside the existing building during normal business working hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, except otherwise indicated.
 1. Weekend Hours: With approval of Owner.
 2. Early Morning Hours: With approval of Owner.
 3. Hours for Utility Shutdowns: Coordinate with Owner's Project Team.
 4. Hours for noisy activity: Coordinate with Owner's Project Team.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 1. Notify Owner not less than 72 hours in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Owner's written permission.

- C. Nonsmoking Building: Smoking is not permitted within the building or on State property.

1.10 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 50-division format and CSI/CSC's "MasterFormat" numbering system.
 1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
 2. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Design Builder. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Design Builder or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011002

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. GMP contingency allowance.
 - 3. Testing and inspecting allowances.
- C. Related Sections include the following:
 - 1. Division 01 Section "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise AE1 of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Owner's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Owner from the designated supplier.

1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.
- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.6 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Design Builder of specific products and materials ordered by Owner or selected by AE2 under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Design Builder's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner

or selected by AE2 under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.7 GMP CONTINGENCY ALLOWANCE

- A. The GMP contingency allowance to allow for unforeseen conditions, expediting of the work and increases in the cost incurred in the work from unforeseeable causes or details from unforeseeable causes or details not capable of reasonable anticipation. The GMP contingency may be applied to any items within the cost of the Work.
- B. Use the GMP contingency allowance only as directed by Owner for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- C. Design Builder's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- D. Change Orders authorizing use of funds from the contingency allowance will include Design Builder's related costs and reasonable overhead and profit margins.
- E. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.8 TESTING AND INSPECTING ALLOWANCES

- A. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.
- B. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure. The cost for incidental labor to assist the testing agency shall be included in the Contract Sum.
- C. Costs of services not required by the Contract Documents are not included in the allowance.
- D. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to Owner by Change Order.

1.9 UNUSED MATERIALS

- A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Owner, prepare unused material for storage by Owner when it is not economically practical to return the material for credit. If directed by AE2, deliver unused material to Owner's storage space. Otherwise, disposal of unused material is Design Builder's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No.1 – GMP Contingency: Include a five percent (5%) contingency allowance with the Guaranteed Maximum Price. The five percent will be equal to five percent of the aggregate costs.
- B. Allowance No. 2 – Testing and Inspection Allowance: Include a sum of Twenty Thousand (\$20,000) Dollars for testing and inspecting

END OF SECTION 012100

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for unit prices.

1.3 DEFINITIONS

- A. Unit price is an amount proposed by bidders, to be stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: The Design Builder will include in individual Specification Sections work that requires establishment of unit prices. Methods of measurement and payment for unit prices will be specified in those Sections.
- C. Owner reserves the right to reject Design Builder's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Design Builder.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

- A. A list of unit prices will be developed by the Design Builder and Owner's Project Team during the Scope Development phase of the project. The unit prices items will be bid with the packages to be bid by the subcontractors. The unit prices will included with the Guaranteed Maximum Price amendment to the contract.

END OF SECTION 012200

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
 - 1. Division 01 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Design Builder's Construction Schedule and Submittals Schedule.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Design Builder allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Design Builder's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Design Builder's Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - c. Design Builder's Schedule.
 - 2. Submit the Schedule of Values to AE2 at earliest possible date but no later than fourteen days after the initial Notice to Proceed with the design services.
 - 3. After the Guaranteed Maximum Price (GMP) has been accepted by the Owner and the Contract Modification has been executed to include the GMP cost, the Design Builder shall revise the Schedule of Values by the Pre-Construction Conference or ten days thereafter. The Schedule of Values must be approved by AE2 and the Owner's Project Team before the first Applications for Payment for GMP work.
 - 4. Subschedules: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.
- B. Form: Use State of Oklahoma DCAM/CAP – Form G703 Application for Payment Continuation Sheet.
- C. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section. Identify mobilization, bonds and insurance and separate costs for material and labor into clearly delineated categories. Include separately from each line item, a direct proportional amount of Design Builder's overhead and profit.
 - 1. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate
 - 2. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

3. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.
4. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
5. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
6. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by AE2 and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Refer to State of Oklahoma DCAM/CAP – Form A140 Application Checklist for information and forms to be used for Applications for Payments.
- C. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Design Builder. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement. Submit to AE2 prior to progress meetings and/or site visits associated with progress verification.
- D. Payment Application Forms: Use State of Oklahoma DCAM/CAP – Form G702 Application for Payment and DCAM/CAP – Form G703 Continuation Sheet. Alternative forms may be accepted with prior written approval by AE2; form must include all information required on State form.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Design Builder. AE2 will return incomplete applications without action. Present required information in typewritten form.
 1. Entries shall match data on the Schedule of Values and Design Builder's Construction Schedule. Use updated schedules if revisions were made. Provide dollar value in each column for each line item for portion of work performed and for stored products.
 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work. Break-out change order amount(s) if associated work is not completed within one pay cycle (application).
- F. Transmittal: Submit proper Applications for Payment to the AE2. Electronic originals are preferred; utilize digital signature or execute in blue ink and scan in color to PDF file. Transmittal shall include waivers of lien and similar attachments if required.
 1. Transmit each copy with an electronic transmittal form listing attachments and recording appropriate information about application.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of Values.
3. Design Builder's Construction Schedule (preliminary if not final).
4. Products list.
5. Schedule of unit prices.
6. Submittals Schedule (preliminary if not final).
7. List of Design Builder's staff assignments.
8. List of Design Builder's principal consultants.
9. Initial progress report.
10. Report of preconstruction conference.
11. Certificates of insurance and insurance policies.
12. Performance, payment and statutory bonds.

H. When AE2 requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

I. When requesting payment for material stored off-site, use State of Oklahoma DCAM/CAP – Form A150 Affidavit. As to Offsite Stored Materials and provide Certificate of Insurance naming Owner as beneficiary.

1.6 MODIFICATION PROCEDURES

A. No change to the Contract, with in the Contract Sum, Contract Time or Work itself will be recognized unless it is covered by a proper change order in accordance with DCAM/CAP – Form A201, General Conditions for Construction Contracts.

B. Any change which will affect the Work, Contract Sum, or Contract Time, shall be documented by issuing a change order. AE2 shall start the change order process by completing the State form.

C. Form: Use State of Oklahoma DCAM/CAP – Form G701, Change Order. Complete all three pages unless directed by AE2 to do otherwise.

D. Execute form by signature of authorized officer.

E. Submit proper Change Order to the AE2. If change order is approved, AE2 will execute and forward to the Using Agency. Final approval shall be by the Owner. Electronic originals are preferred; utilize digital signature or execute in blue ink and scan in color to PDF file.

F. Upon receipt of the approved change order from the Owner, the Design Builder shall advise the site staff and subcontractors of the change and arrange for the execution of the change in the work.

1.7 APPLICATIONS FOR PAYMENT AT SUBSTANTIAL COMPLETION

A. After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

1.8 APPLICATIONS FOR FINAL PAYMENT

A. Refer to State of Oklahoma DCAM/CAP – Form A140 Application Checklist for forms to be used for Application for Final Payment.

B. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.

- C. Additional Forms: Include with Application for Payment form, State of Oklahoma DCAM/CAP – Form A106 Certificate of Contract Completion (2 pages) and DCAM/CAP – Form A110 Affidavit for Final Payment. Release of Surety Power of Attorney shall also accompany final application for payment.
- D. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 017700 and set forth in the State of Oklahoma DCAM/CAP Form A201 General Conditions for Construction Contracts.

1.9 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of, but not limited to, the following:
 - 1. Products wasted or disposed of in an unacceptable manner.
 - 2. Products determined as defective before or after placement.
 - 3. Products not completely unloaded from transporting vehicles.
 - 4. Products placed beyond lines and levels of required work.
 - 5. Products remaining on hand after completion of the Work, unless specified otherwise.
 - 6. Loading, hauling, and disposing of rejected Products.
 - 7. Products wasted or disposed of in an unacceptable manner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Administrative and supervisory personnel.
 - 2. Construction Project meetings.
 - 3. Requests for Interpretation (RFIs).
- B. Design meetings are included in Section 013316 Design After Award.

1.3 DEFINITIONS

- A. RFI: Request from Design-Builder seeking interpretation or clarification of the Contract Documents from AE2.

1.4 COORDINATION

- A. Coordination: Design Builder shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Make adequate provisions to accommodate items scheduled for later installation.
 - 3. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution for Owner and separate contractors if coordination of their Work is required. Include such items as required notices, reports, and list of attendees at meetings.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Design Builder's Construction Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Project closeout activities.

1.5 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
 - 1. Include special personnel required for coordination of operations with other contractors.

1.6 CONSTRUCTION PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Notify Owner's Project Team of scheduled meeting dates and times.
 - 2. Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner's Project Team, within five days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner's Project Team, but no later than 15 days after execution of the Notice of Proceed. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 - 1. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Preparation of Record Documents.
 - l. Use of the premises and existing building.
 - m. Work restrictions.
 - n. Owner's occupancy requirements.
 - o. Responsibility for temporary facilities and controls.
 - p. Construction waste management and recycling.
 - q. Parking availability.
 - r. Office, work, and storage areas.
 - s. Equipment deliveries and priorities.
 - t. First aid.
 - u. Security.
 - v. Progress cleaning.
 - w. Working hours.
 - 2. Minutes: Record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
 - 1. Advise Owner's Project Team of scheduled meeting dates.
- D. Progress Meetings: Conduct progress meetings at weekly intervals. Coordinate dates of meetings with preparation of payment requests.
 - 1. Attendees: In addition to representatives of Owner's Project Team and AE2, the Design Builder, each subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Design Builder's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Design Builder's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
- b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
3. Minutes: Record the meeting minutes.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Design Builder's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

1.7 CONSTRUCTION REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit a construction RFI in the form specified.
 1. Construction RFIs shall originate with Design Builder. Construction RFIs submitted by entities other than Design Builder will be returned with no response.
 2. Coordinate and submit construction RFIs in a prompt manner so as to avoid delays in Design Builder's work or work of subcontractors.
- B. Content of the construction RFI: Include a detailed, legible description of item needing interpretation and the following:
 1. Project name.
 2. Date.
 3. Name of Design Builder.

4. Name of AE2.
 5. RFI number, numbered sequentially.
 6. Specification Section number and title and related paragraphs, as appropriate.
 7. Drawing number and detail references, as appropriate.
 8. Field dimensions and conditions, as appropriate.
 9. Design Builder's suggested solution(s). If Design Builder's solution(s) impact the Contract Time or the Contract Sum, Design Builder shall state impact in the RFI.
 10. Design Builder's signature.
 11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
 - a. Supplementary drawings prepared by Design Builder shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. AE2's and Owner's Project Team Action: AE2 and Owner's Project Team will review each construction RFI, determine action required, and return it. Allow seven working days for AE2's and Owner's Project Team response for each construction RFI.
1. The following construction RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of AE2's actions on submittals.
 - f. Incomplete construction RFIs or construction RFIs with numerous errors.
 2. Owner's Project Team action may include a request for additional information, in which case time for response will start again.
 3. Owner's Project Team action on construction RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Design Builder to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
 - a. If Design Builder believes the construction RFI response warrants change in the Contract Time or the Contract Sum, notify AE2 and Owner's Project Team in writing within 10 days of receipt of the construction RFI response.
- D. On receipt of Owner's Project Team action, update the construction RFI log and immediately distribute the construction RFI response to affected parties. Review response and notify Owner's Project Team within seven days if Design Builder disagrees with response.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Preliminary Construction Schedule.
2. Design Builder's Construction Schedule.
3. Submittals Schedule.
4. Daily construction reports.
5. Material location reports.
6. Field condition reports.
7. Special reports.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 2. Predecessor Activity: An activity that precedes another activity in the network.
 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by Architect.
- C. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
 1. Float time is not for the exclusive use or benefit of either Owner or Design Builder, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- G. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.

- H. Major Area: A story of construction, a separate elevation on the building, or a similar significant construction element.
- I. Milestone: A key or critical point in time for reference or measurement.
- J. Network Diagram: A graphic diagram of a network schedule, showing activities and activity relationships.
- K. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 SUBMITTALS

- A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor.
 - 5. Description of the Work covered.
 - 6. Scheduled date for AE2 and Owner's Project Team final release or approval.
- B. Preliminary Construction Schedule: Submit two opaque copies.
 - 1. Approval of cost-loaded preliminary construction schedule will not constitute approval of Schedule of Values for cost-loaded activities.
- C. Preliminary Network Diagram: Submit two opaque copies, large enough to show entire network for entire construction period. Show logic ties for activities.
- D. Design Builder's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
 - 1. Submit an electronic copy of schedule on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.
- E. CPM Reports: Concurrent with CPM schedule, submit three copies of each of the following computer-generated reports. Format for each activity in reports shall contain activity number, activity description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
 - 1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
 - 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
 - 3. Total Float Report: List of all activities sorted in ascending order of total float.
 - 4. Earnings Report: Compilation of Design Builder's total earnings from commencement of the Work until most recent Application for Payment.
- F. Daily Construction Reports: Submit two copies at monthly intervals.
- G. Material Location Reports: Submit two copies at monthly intervals.
- H. Field Condition Reports: Submit two copies at time of discovery of differing conditions.
- I. Special Reports: Submit two copies at time of unusual event.

1.5 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Owner's request.

- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to the Preliminary Construction Schedule and Design Builder's Construction Schedule, including, but not limited to, the following:
1. Review software limitations and content and format for reports.
 2. Verify availability of qualified personnel needed to develop and update schedule.
 3. Discuss constraints, including phasing, work stages, interim milestones and Owner occupancy.
 4. Review time required for review of submittals and resubmittals.
 5. Review requirements for tests and inspections by independent testing and inspecting agencies.
 6. Review and finalize list of construction activities to be included in schedule.
 7. Review submittal requirements and procedures.
 8. Review procedures for updating schedule.

1.6 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Design Builder's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
1. Secure time commitments for performing critical elements of the Work from parties involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Design Builder's Construction Schedule.
 2. Initial Submittal: Submit concurrently with preliminary bar-chart schedule. Include submittals required during the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - a. At Design Builder's option, show submittals on the Preliminary Construction Schedule, instead of tabulating them separately.
 3. Final Submittal: Submit concurrently with the first complete submittal of Design Builder's Construction Schedule.

2.2 DESIGN BUILDER'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Design Builder's Construction Schedule with Submittals Schedule.
 4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for AE2's and Owner's Project Team administrative procedures necessary for certification of Substantial Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
 2. Work under More Than One Contract: Include a separate activity for each contract.
 3. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Limitations of continued occupancies.
 - b. Uninterruptible services.
 - c. Use of premises restrictions.
 - d. Seasonal variations.
 4. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Subcontract awards.
 - b. Submittals.
 - c. Purchases.
 - d. Mockups.
 - e. Fabrication.
 - f. Sample testing.
 - g. Deliveries.
 - h. Installation.
 - i. Tests and inspections.
 - j. Adjusting.
 - k. Curing.
 5. Area Separations: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion and any interim milestones.
- F. Cost Correlation: At the head of schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of the Work performed as of dates used for preparation of payment requests.
1. Refer to Division 01 Section "Payment Procedures" for cost reporting and payment procedures.
 2. Design Builder shall assign cost to construction activities on the CPM schedule. Costs shall not be assigned to submittal activities unless specified otherwise but may, with Owner's approval, be assigned to fabrication and delivery activities. Costs shall be under required principal subcontracts for testing and commissioning activities, operation and maintenance manuals, punch

- list activities, Project Record Documents, and demonstration and training (if applicable), in the amount of 5 percent of the Contract Sum.
3. Each activity cost shall reflect an accurate value subject to approval by the AE2 and Owner.
 4. Total cost assigned to activities shall equal the total Contract Sum.
- G. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.
- H. Computer Software: Prepare schedules using a program that has been developed specifically to manage construction schedules.
1. Ensure that computer scheduling software can export to Microsoft Project in format acceptable to Owner.

2.3 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within 14 days of date established for the Notice to Proceed.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 60 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

2.4 DESIGN BUILDER'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Design Builder's Construction Schedule within 14 days of date established for the Notice to Proceed. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 1. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.5 DESIGN BUILDER'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

- A. General: Prepare network diagrams using AON (activity-on-node) format.
- B. Preliminary Network Diagram: Submit diagram within 14 days of date established for the Notice to Proceed. Outline significant construction activities for the first 60 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.
- C. CPM Schedule: Prepare Design Builder's Construction Schedule using a computerized, cost- and resource-loaded, time-scaled CPM network analysis diagram for the Work.
 1. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 30 days after date established for the Notice to Proceed.
 - a. Failure to include any work item required for performance of this Contract shall not excuse Design Builder from completing all work within applicable completion dates, regardless of Architect's approval of the schedule.
 2. Conduct educational workshops to train and inform key Project personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.

3. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
 4. Use "one workday" as the unit of time. Include list of nonworking days and holidays incorporated into the schedule.
- D. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the preliminary network diagram, prepare a skeleton network to identify probable critical paths.
1. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
 - a. Preparation and processing of submittals.
 - b. Mobilization and demobilization.
 - c. Purchase of materials.
 - d. Delivery.
 - e. Fabrication.
 - f. Utility interruptions.
 - g. Installation.
 2. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
 3. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
 4. Format: Mark the critical path. Locate the critical path near center of network; locate paths with most float near the edges.
 - a. Subnetworks on separate sheets are permissible for activities clearly off the critical path.
- E. Initial Issue of Schedule: Prepare initial network diagram from a list of straight "early start-total float" sort. Identify critical activities. Prepare tabulated reports showing the following:
1. Design Builder or subcontractor and the Work or activity.
 2. Description of activity.
 3. Principal events of activity.
 4. Immediate preceding and succeeding activities.
 5. Early and late start dates.
 6. Early and late finish dates.
 7. Activity duration in workdays.
 8. Total float or slack time.
 9. Average size of workforce.
 10. Dollar value of activity (coordinated with the Schedule of Values).
- F. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
1. Identification of activities that have changed.
 2. Changes in early and late start dates.
 3. Changes in early and late finish dates.
 4. Changes in activity durations in workdays.
 5. Changes in the critical path.
 6. Changes in total float or slack time.
 7. Changes in the Contract Time.
- G. Value Summaries: Prepare two cumulative value lists, sorted by finish dates.
1. In first list, tabulate activity number, early finish date, dollar value, and cumulative dollar value.
 2. In second list, tabulate activity number, late finish date, dollar value, and cumulative dollar value.

3. In subsequent issues of both lists, substitute actual finish dates for activities completed as of list date.
4. Prepare list for ease of comparison with payment requests; coordinate timing with progress meetings.

2.6 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 1. List of subcontractors at Project site.
 2. List of separate Design Builders at Project site.
 3. Approximate count of personnel at Project site.
 4. Equipment at Project site.
 5. Material deliveries.
 6. High and low temperatures and general weather conditions.
 7. Accidents.
 8. Meetings and significant decisions.
 9. Unusual events (refer to special reports).
 10. Stoppages, delays, shortages, and losses.
 11. Emergency procedures.
 12. Change Orders received and implemented.
 13. Construction Change Directives received and implemented.
 14. Partial Completions.
 15. Substantial Completions authorized.
- B. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.7 SPECIAL REPORTS

- A. General: Submit special reports directly to Owner within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Design Builder's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 DESIGN BUILDER'S CONSTRUCTION SCHEDULE

- A. Scheduling Consultant: Engage a consultant to provide planning, evaluation, and reporting using CPM scheduling.
 1. In-House Option: Owner may waive the requirement to retain a consultant if Design Builder employs skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.

2. Meetings: Scheduling consultant shall attend all meetings related to Project progress, alleged delays, and time impact.
- B. Design Builder's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- C. Distribution: Distribute copies of approved schedule to AE2, Owner, testing and inspecting agencies, and other parties identified by Design Builder and Owner's Project Team with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:

1. Preconstruction photographs.
2. Periodic construction photographs.
3. Final Completion construction photographs.
4. Preconstruction videotapes.
5. Time-lapse sequence construction photographs.

1.3 SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same label information as corresponding set of photographs.
- B. Construction Photographs: Submit digital copies of each photographic view within fourteen days of taking photographs.
 1. Format: Digital photographs with an index providing information about the photographs.
 2. Provide the following information:
 - a. Date photograph was taken if not date stamped by camera.
 - b. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - c. Unique sequential identifier.
 3. Submit digital image electronic files on CD-ROM or memory stick. Identify electronic media with date photographs were taken. Submit images that have same aspect ratio as the sensor, uncropped.

1.4 USAGE RIGHTS

- A. The Design Builder shall transfer ownership of the photographs to the State of Oklahoma.

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

- A. Digital Images: Provide images in uncompressed TIFF format, produced by a digital camera with minimum sensor size of 12.0 megapixels, and at an image resolution of not less than 1600 by 1200 pixels.

PART 3 - EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 1. Maintain key plan with each set of construction photographs that identifies each photographic location.

- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
1. Date and Time: Include date and time in filename for each image.
 2. Field Office Images: Maintain one set of images on CD-ROM in the field office at Project site, available at all times for reference. Identify images same as for those submitted to AE2.
- C. Preconstruction Photographs: Before commencement of demolition and starting construction, take color, digital photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by AE2.
1. Flag construction limits before taking construction photographs.
 2. Take sufficient photographs of existing building to accurately record physical conditions at start of construction.
- D. Periodic Construction Photographs: Take color, digital photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.
- E. Owner-Directed Construction Photographs: From time to time, Owner will instruct photographer about number and frequency of color, digital photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.
- F. Time-Lapse Sequence Construction Photographs: Take four color, digital photographs as indicated, to show status of construction and progress since last photographs were taken.
1. Frequency: Take photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment.
 2. Vantage Points: Following suggestions by AE2, Owner's Project Team, and Design Builder to select vantage points. During each of the following construction phases, take not less than two of the required shots from same vantage point each time to create a time-lapse sequence.
- G. Final Completion Construction Photographs: Take a minimum of twenty-four color photographs after date of Substantial Completion for submission as Project Record Documents. AE2 will direct photographer for desired vantage points.
1. Do not include date stamp.
- H. Additional Photographs: AE2 or Owner's Project Team may issue requests for additional photographs, in addition to periodic photographs specified.
1. Three days' notice will be given, where feasible.
 2. In emergency situations, take additional photographs within 24 hours of request.
 3. Circumstances that could require additional photographs include, but are not limited to, the following:
 - a. Special events planned at Project site.
 - b. Immediate follow-up when on-site events result in construction damage or losses.
 - c. Photographs to be taken at fabrication locations away from Project site.
 - d. Substantial Completion of a major phase or component of the Work.
 - e. Extra record photographs at time of final acceptance.
 - f. Owner's request for special publicity photographs.

END OF SECTION 013233

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires AE2's responsive action.
- B. Informational Submittals: Written information that does not require AE2's responsive action. Submittals may be rejected for not complying with requirements.
- C. Pre-Construction Submittals: Design-Builder submittals to be submitted prior to construction work including the following:
 - 1. Certificates of Insurance
 - 2. Surety Bonds
 - 3. Construction progress Schedule
 - 4. Submittal register
 - 5. Schedule of prices
 - 6. Accident Prevention Plan
 - 7. Work Plan
 - 8. Quality Control Plan

1.4 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Owners Project Team reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Owner's Project Team receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Owner's Project Team will advise Design Builder when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
 - 4. Sequential Review: Where sequential review of submittals by Owner's Project Team, or other parties is indicated, allow 21 days for initial review of each submittal.
 - 5. Submittal will be returned to AE2 before being returned to Design Builder.
- C. Identification: Include the following information for identification:
 - 1. Project name.

2. Date.
 3. Name and address of AE2
 4. Name and address of Design Builder
 5. Name and address of subcontractor.
 6. Name and address of supplier.
 7. Name of manufacturer.
 8. Submittal number or other unique identifier, including revision identifier.
 9. Number and title of appropriate Specification Section.
 10. Drawing number and detail references, as appropriate.
 11. Location(s) where product is to be installed, as appropriate.
 12. Other necessary identification.
- D. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.
- E. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal electronically to extents possible, using a transmittal form in PDF format. Owner will return submittals, without review, received from sources other than Design Builder.
1. On a separate sheet in PDF format, prepared on Design Builder's letterhead, record relevant information, requests for data, revisions other than those requested by AE2 or Owner's Project Team on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations.
- F. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from AE2's action stamp.
- G. Distribution: Show distribution on transmittal forms.
- H. Use for Construction: Use only final submittals with mark indicating approval notation from AE2's action stamp with any notations by AE2.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. Submit Product Data before or concurrent with Samples.
 2. Number of Copies: Submit one electronic copy to greatest extents possible of Product Data, unless otherwise indicated.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale.
1. Number of Copies: Submit one electronic copy of each submittal.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of appropriate Specification Section.
3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Owner will return submittal with options selected.
5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit two sets of Samples. Owner will retain one Sample set; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by the Contract Documents, accepted proposal or the completed design.
 1. Number of Copies: Submit one electronic copy of each submittal, unless otherwise indicated.
- B. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections and submit to Owner. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- C. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to AE2.

PART 3 - EXECUTION

3.1 AE2'S ACTION

- A. Action Submittals: AE2 will review each submittal, make marks to indicate corrections or modifications required, and return it. AE2 will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- B. Informational Submittals: AE2 will review each submittal and will forward each submittal to appropriate party and Owner's Project Team.
- C. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

END OF SECTION 013300

SECTION 013316 – DESIGN AFTER AWARD

PART 1 - GENERAL

1.1 SUMMARY

- A. The information contained in this section applies to the design required after award.
- B. The Design Builder is encouraged and may also develop and submit multiple cost saving proposals for innovative design alternatives.
- C. Design submittals shall be as follows:
 - 1. Phase 1 Scope Development task will be the preliminary scoping services required to develop the first submittal which represents: approximately 35% complete drawings and specifications of all other required documentation incorporating the investigations and analysis of repair means and methods developed in conjunction with Owner's Project Team. As part of the Scope Development, the Design Build team shall prepare a list of suggested items for unit pricing and potential use for this project. These items are to allow the Owner's Project Team to increase the GMP for items that are not qualified at time of award.
 - 2. Phase 2 shall include all design services required to complete the design and bid the trade packages needed to prepare a Guaranteed Maximum Price and construct and complete the project.
 - a. The first design task of Phase 2 will to complete the Design Development submittal (65%) which represents approximately 65% complete drawings and specifications of all required construction documents. Phase 2 design shall not begin until an approval of the Phase 1 Submittal by the Owner. Phase 2 also includes incorporating the revisions identified in the Phase 1.
 - b. The second design task of Phase 2 shall include all design services required to complete the design submittal (100%). This design shall not begin until an approval of the Phase 2 first task submittal is issued by the Owner. This second design task shall include incorporation of the revisions identified in the first design task submittal review.
 - c. The last task of Phase 2 will be to issue the trade packages to sub-contractors for bidding, answering of questions regarding the design and trade packages and receiving bids.
- D. The Design Builder will provide in writing the design submittal structure for entire design effort for approval. Logical breaks or phasing in the design must be considered along with how the final design effort will be coordinated between all disciplines. A final design will be required tying all design submittals together. Each design submittal shall be complete for the feature(s) of work requesting approval. A 21-day review period will be provided to the Owner for each design submittal. After approval of the design submittals, the Owner will issue a Letter of Authorization to commence the bidding associated with the design submittal.
- E. The Design Builder may proceed with the bidding included in separate design packages after the Owner has reviewed the final (100%) design submission for that package, review comments have been addressed and resolved to the Owner's satisfaction and has agreed that the design package may be released for bidding the separate trade packages.
- F. The Owner's acceptance of the design submittal and subsequent authorization to proceed, shall not infer that the Owner is granting a warranty that the design is complete and coordinated. Review, approval or acceptance of the Design Builder's work, shall not relieve the Design

Builder from responsibility for errors and omissions. It remains the duty of the Design Builder to inform the Owner of any changes to the documents.

1.2 AE2

- A. The Design-Builder shall identify, for approval, the AE2 and designers of record (DOR) that will be responsible for each area of design. One DOR may be responsible for more than one area. All areas of design disciplines shall be accounted for by a listed, Oklahoma Professional Registered designer of record. The designer of record's shall stamp, sign, and date each design drawing and other design deliverables under their responsible discipline at each design submittal stage.
- B. If the deliverables are not ready for release for construction, they should be identified as "preliminary" or "not for release for construction" or by using some other appropriate designation.
- C. The AE2(s) shall also be responsible for maintaining the integrity of the design and for compliance with the contract requirements through construction and documentation of the as-built condition by coordination, review and approval of extensions of design, material, equipment and other construction submittals, review and approval or disapproval of requested deviations to the accepted design or to the contract, coordination with the Owner of the above activities, and by performing other typical professional designer responsibilities.

1.3 MEETINGS

- A. The Owner's Project Team and the Design Builder shall participate the pre-design and scheduled review meetings
 - 1. Pre-Design Conference. The Owner's Project Team and the Design Builder shall participate in a pre-design conference. The participants will involve the Owner's Project Team members, AE2, and Design Builder.
 - 2. The purpose of this meeting is to develop, establish, and agree to comprehensive design development processes including conduct of conferences and expectations of design development at conferences. The Design Builder shall review their proposed project schedule and suggest ways to streamline processes.
- B. Procedures. After receipt of an interim design submission from the Design Builder, the Owner's Project Team will review and comment on the interim design submittal within 21 calendar days.
 - 1. Review Comments. For each interim design review submittal, the Owner's Project Team will furnish, to the Design Builder, a single consolidated, validated listing of all comments from the various design disciplines. The review will be for conformance with the technical recommendations of the Owner's Project Team for the Scope Development phase, the subsequent development of the design and the Design Builder's RFP proposal. If the Design Builder disagrees technically with any comment or comments and does not intend to comply with the comment, he/she must clearly outline, with ample justification, the reasons for noncompliance within 5 days after receipt of these comments in order that the comment can be resolved.
 - 2. Review Conference. A review conference will be held for each design submittal. The Design Builder shall bring the personnel that developed the design submittal to the review conference. The conference will take place the week after the receipt of the comments by the Design Builder, unless otherwise scheduled.
 - 3. Meeting Documentation. The Design Builder shall prepare meeting minutes and submit them for review and approval by the Owner within 7 calendar days of the meeting.

1.4 DESIGN PHASE 1– PRELIMINARY PLANNING/SCOPE DEVELOPMENT OR SCHEMATIC DESIGN

- A. General

1. Submittals and any required re-submittals shall include drawings and specifications along with supporting data as needed to fully establish the proposed level of quality of systems and materials.
 2. Drawings to become final documents shall be developed using a CADD system compatible with Auto Cad Version 2014 or later. All supporting specifications and calculations data shall be submitted as 8-1/2" x 11", vertically bound material. All calculations shall be page numbered and shall include a detailed table of contents listing page numbers.
 3. The initial Scope Development design submittal shall also consist of approximately 35% complete drawings and specifications of all other design disciplines. The level of completion for each design phase may also be modified for individual disciplines. This generally corresponds to completion of the "Schematic Design Phase" as defined by the American Institute of Architects (AIA). The design submittal documents must be complete enough to support consideration for authorization to proceed with the Design Phase 2, Design Development design submittal.
 4. A design analysis is required within the initial design submittal. The design analysis shall consist of a written narrative of project scoping decisions based on the Design Builder's investigations and analysis and interpretation and incorporation of the Owner's Project Team's information sufficient to document and support the proposed project scoping. The Design Builder can determine the design analysis format.
 5. This first submittal shall be submitted for review at the appropriate scheduled time after the award of the Design-Build contract. A review meeting will be conducted at the appropriate scheduled time at which the Design Builder appropriate representatives of the design firm section shall attend.
 6. Incorporate all of the comments and revisions resulting from the review conference in this submittal.
 7. Three paper submittals and one electronic copy of the first design submittal (drawings, specifications and design analysis) shall be delivered to the Owner. All documents shall contain an index of contents and be accompanied with a transmittal letter.
 8. The Owner and Owner's Representatives will review and comment on each submittal. The Design Builder shall respond in writing to review comments within 21 days of receipt. The Design Builder, and appropriate design team representatives, shall attend a review meeting at a location to be determined to review comments and responses. The Design Builder shall prepare minutes of this meeting. Comments shall be incorporated into the design or otherwise be mutually resolved prior to proceeding.
 9. After review and approval of the First Design Submittal by the Owner and all review comments and revisions have been incorporated in the documents, no changes will be made to the documents without the consent of the Owner.
- B. Risk Management Plan shall be included within the Report and shall follow through until Substantial Completion. It shall be a compilation of all risks (obtained from the continued Design-Builder risk assessment efforts, the Owner, and other parties) and solutions to each risk identified. If the Design-Builder does not identify a risk they do not control, the Design-Builder is inferring the risk is under their control and a part of their contract to meet the intent of the state.
1. The Risk Management Plan shall identify the risk, risk mitigation, and measurement of risk mitigation. Identify every activity which involves participants who the Design-Builder does not control, or where insufficient information exists and provide the following information:
 - a. When the risk occurs
 - b. What the Design-Builder will do to minimize the risk

- c. How the Design-Builder will know if they are being successful or not in mitigating the risk
- d. How the Design-Builder will communicate this to the state
- e. How the Design-Builder will document deviations

2. Risk Assessment

- a. The Design-Build shall identify the risks that they do not control that could result in project cost or schedule deviations as well as low customer satisfaction. These risks include inaccurate expectations and unforeseen environmental conditions. The Design-Builder should list and prioritize all risk items that are unique, and applicable, to this project. The risk should be described in simple, non-technical terms and should contain enough information to understand why the risk is a valid risk. The Design- Builder must also explain how they will attempt to mitigate or minimize the impact of the risks
- b. It is the state's responsibility to identify their perceived risks, concerns, and issues which it will require the Design-Builder to mitigate and. The Design-Builder is at risk and it is the Design-Builder's responsibility to ensure they understand the scope of the project and clearly identify what they are delivering. It is also the Design-Builder's responsibility to manage and mitigate the risk of the project. In many cases, one of the Design-Builder's biggest risks (in terms of delivering the service with high satisfaction) is the state. It is in the Design-Builder's best interest to understand the state's expectations and identify any issues or concerns as early as possible. The Design-Builder should minimize their risk by creating documentation that assists them to be proactive in mitigating risk

C. Design Status Reports

1. A design status report in a format established by the Owner shall be prepared and submitted at the end of every month. As a minimum the report shall summarize activity and progress to date and list all outstanding issues and information needed to complete the design. Additional data as may be required by the Owner shall be included.

1.5 DESIGN PHASE 2– DESIGN AND BIDDING PHASE

A. Design Development

1. The Design Phase 2 first design task submittal documents shall consist of approximately 65% complete drawings and specifications of all other required construction documents for all trades, systems, and components of the project. Included in this submittal is the incorporation of all comments and revisions resulting from the review conference.
2. A design analysis is required with the Design Phase 2 submittals. The Design Analysis shall consist of the written narrative from the initial submittal supplemented with subsequent data as required to document and support the level of design for all disciplines at this point in the project. The requirements and format for this design analysis is the same as for Design Phase 1.
3. The Design Phase 2 Submittals (drawings, specifications and design analysis) shall be sent to Owner, accompanied with a transmittal letter. The submittal shall include readable electronic files for plans, specifications and supporting documents of the entire submittal. Submittal requirements shall be the same as per those for Design Phase 1. .
4. The Owner's Project Team will review and comment on each submittal. The Design Builder shall respond in writing to review comments within 21 days of receipt and also provide review responses in a readable electronic format. The Design Builder, and appropriate design team representatives, shall attend a review meeting at a location to be determined to review comments and responses. The Design Builder shall prepare minutes

of this meeting. Comments shall be incorporated into the design or otherwise be mutually resolved prior to proceeding.

5. After review and approval of the Design Phase 2 first design task submittal by the Owner and all review comments and revisions have been incorporated in the documents, no changes will be made to the documents without the consent of the Owner.

B. Design Status Reports

1. The design status report shall continue to be prepared and submitted at the end of every month. Requirements shall remain the same as for DESIGN PHASE 1.

C. Construction Documents

1. The Design Phase 2 second design task submittal documents shall consist of 100% complete drawings and specifications for all trades, systems, and components of the project. Included in this submittal is the incorporation of all comments and revisions resulting from the previous review conference.
2. A design analysis will not be required with the Design Phase 2 second design task submittal, unless changes have been made to the scope of work or project approach. If changes have been made to either, the design analysis will be updated and submitted. The requirements and format for this design analysis is the same as for Design Phase 1.
3. The Design Phase 2 second design task submittal (drawings, specifications and design analysis) shall be sent to the Owner, accompanied with a transmittal letter. Submittal requirements shall be the same as per those for Design Phase 1. The submittal shall include readable electronic files for plans, specifications and supporting documents of the entire submittal.
4. The Owner's Project Team will review and comment on each submittal. The Design Builder shall respond in writing to review comments within 21 days of receipt and also provide review responses in a readable electronic format. The Design Builder, and appropriate design team representatives, shall attend a review meeting at a location to be determined to review comments and responses. The Design Builder shall prepare minutes of this meeting. Comments shall be incorporated into the design or otherwise be mutually resolved prior to proceeding.
5. After review and approval of the Design Phase 2 second design task submittal by the Owner and all review comments and revisions have been incorporated in the documents, no changes will be made to the documents without the consent of the Owner.

D. Design Status Reports

1. The design status report shall continue to be prepared and submitted at the end of every month. Requirements shall remain the same as for DESIGN PHASE 1.

1.6 FIELD INVESTIGATION:

- A. While completing Phase 1 of the DESIGN PHASE, the Design Builder shall conduct field investigations at the site as required to resolve design issues and to ensure that design submittals reflect existing conditions.
- B. Meetings and discussion with Owner's Project Team will be held to explain Owner's Project Team's field investigations and analysis and develop repair and restoration strategies and solutions.
- C. Access to the site prior to Construction phase shall be coordinated with the Owner. Investigations that involve removal of materials or other investigations that may affect the materials on the building shall receive approval of the Owner prior to being performed.

1.7 DESIGN DISCREPANCIES

- A. In the event design discrepancies or omissions become apparent during construction, the Design Builder, as AE2, shall be responsible for correction of the design and shall furnish the necessary drawings, specifications, and other support data as required to resolve the condition to the satisfaction of the Owner. The Design Builder shall further perform all work necessary to execute the correct design at no expense to the Owner.

1.8 DRAWINGS

- A. Professionally sealed drawings under this contract shall be well prepared, complete, and accomplished in accordance with best professional practice to show clearly and concisely the type and extent of work to be performed.
- B. Design Drawings Format
 - 1. Final design drawings shall be English “D” size original plotted paper produced from CADD fully compatible with the required format. A CD ROM containing all required documents shall be furnished in addition to paper drawings. Electronic documents shall be in pdf format.
 - 2. Provide an external label on each CD ROM indicating company/organization name, point of contact phone number, creation date, and volume label and number; provide a hard copy documentation handbook. This handbook will contain the specifics of the database, the file names, reference file names, plotting files, cell library names, level designation assignments, and all other pertinent information used in constructing and managing the drawings and database.
- C. The Final Design Documents (Design Drawings and Project Manual / Specifications) shall include 100% complete and coordinated drawings and specifications and updated design analyses. Drawings shall generally include, but not be limited to, the following in the order listed:
 - 1. SPECIFICATIONS
 - a. The interim submittal and final specifications shall be prepared using Construction Specifications Institute (CSI) as established by the CSI Manual of Practice (latest edition) and the 2004 Masterformat.
 - b. Specifications developed utilizing other commercially available sources shall be provided to the Owner in Word 2010 format.
 - c. Final specifications shall be primarily prescriptive type specifications including descriptive, reference standard, or proprietary (closed or open) methods. Where proprietary specifications are provided, detailed descriptive material requirements shall not be included. Specifications shall include requirements for all necessary submittals and quality control testing to show compliance with RFP requirements and as adequate for record purposes.
 - d. The specifications shall clearly identify, where appropriate, the specific products chosen to meet the requirements of the Contract (manufacturer's brand names and model numbers or similar product information). The Design Builder shall be responsible for coordinating references, along with the Contract performance requirements, to specific specification sections (number and title) within the construction specifications.

1.9 DESIGN COMPLETE CONSTRUCTION DOCUMENT REQUIREMENTS

- A. After the Final Design Submission and Review Conference and after Owner acceptance of the Final Design submission, the Design Builder shall revise the design documents for the design package to incorporate the comments generated and resolved in the final review conference, perform a final review and submit the final, design complete documents. Label the final design complete documents “FOR CONSTRUCTION” or use similar language.

1.10 COMPETITIVE SELECTION PROCESS (BIDDING)

- A. The Design-Builder shall request at least three competitive, sealed proposals or bids for all portion of the Work from potential Design Builders or suppliers acceptable to the Owner, one of which may be the Design-Builder.
- B. The Owner and the Design-Builder will jointly open and review proposals or bids, including any proposal or bid the Design-Builder submits on its own behalf. The Design Builder will determine, with advice from the Owner’s Project Team, which proposals or bids will be accepted.

1.11 CONSTRUCTION SUBMITTALS

- A. Construction submittals shall be specified and provided as required to provide sufficient quality control and to provide the necessary record documents such as as-built drawings.

1.12 TESTING

- A. AE2 shall specify testing to assure quality of critical construction and cost control. Design Builder shall provide the listing of testing to Owner’s Project Team with the final design submittal.

1.13 AS-BUILT DOCUMENTS

- A. The Design Builder shall maintain accurate records of construction conditions that vary from the approved design documents. The Design Builder shall clearly mark varying conditions in red on two (2) record sets of construction documents maintained at the project site. Refer to Section 017839 PROJECT RECORD DOCUMENTS for further requirements for as-built drawing production.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION 013316

SECTION 013591 - HISTORIC TREATMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes special procedures for historic treatment on Project including, but not limited to, the following:
 - 1. Storage and protection of existing historic materials.
 - 2. Temporary protection of historic materials during construction.
 - 3. Protection during use of heat-generating equipment.
 - 4. Historic treatment procedures.

1.3 DEFINITIONS

- A. "Preservation": To apply measures necessary to sustain the existing form, integrity, and materials of a historic property. Work may include preliminary measures to protect and stabilize the property.
- B. "Rehabilitation": To make possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- C. "Restoration": To accurately depict the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and the reconstruction of missing features from the restoration period.
- D. "Reconstruction": To reproduce in the exact form and detail a building, structure, or artifact as it appeared at a specific period in time.
- E. "Stabilize": To apply measures designed to reestablish a weather-resistant enclosure and the structural reinforcement of an item or portion of the building while maintaining the essential form as it exists at present.
- F. "Protect and Maintain": To remove deteriorating corrosion, reapply protective coatings, and install protective measures such as temporary guards; to provide the least degree of intervention.
- G. "Repair": To stabilize, consolidate, or conserve; to retain existing materials and features while employing as little new material as possible. Repair includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials. Within restoration, repair also includes limited replacement in kind, rehabilitation, and reconstruction, with compatible substitute materials for deteriorated or missing parts of features when there are surviving prototypes.
- H. "Replace": To duplicate and replace entire features with new material in kind. Replacement includes the following conditions:
 - 1. Duplication: Includes replacing elements damaged beyond repair or missing. Original material is indicated as the pattern for creating new duplicated elements.
 - 2. Replacement with New Materials: Includes replacement with new material when original material is not available as patterns for creating new duplicated elements.
 - 3. Replacement with Substitute Materials: Includes replacement with compatible substitute materials. Substitute materials are not allowed, unless otherwise indicated.

- I. "Remove": To detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- J. "Remove and Salvage": To detach items from existing construction and deliver them to Owner.
- K. "Remove and Reinstall": To detach items from existing construction, repair and clean them for reuse, and reinstall them where indicated.
- L. "Existing to Remain" or "Retain": Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or removed and reinstalled.
- M. "Material in Kind": Material that matches existing materials, as much as possible, in species, cut, color, grain, and finish.

1.4 SUBMITTALS

- A. Historic Treatment Program: Submit a written plan for each phase or process including protection of surrounding materials during operations. Describe in detail materials, methods, and equipment to be used for each phase of work.
- B. Alternative Methods and Materials: If alternative methods and materials to those indicated are proposed for any phase of work, provide a written description including evidence of successful use on other, comparable projects, and program of testing to demonstrate effectiveness for use on this Project.

1.5 QUALITY ASSURANCE

- A. Historic Treatment Preconstruction Conference: Conduct conference at Project site:
 - 1. Review precautions and effects of products and procedures on building materials, components, and vegetation.

1.6 STORAGE AND PROTECTION OF HISTORIC MATERIALS

- A. Removed and Salvaged Historic Materials:
 - 1. Clean salvaged historic items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's storage area designated by Owner.
 - 5. Protect items from damage during transport and storage.
 - 6. Do not dispose of items removed from existing construction without prior written consent of Owner.
- B. Removed and Reinstalled Historic Materials:
 - 1. Clean and repair historic items to functional condition adequate for intended reuse.
 - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- C. Existing Historic Materials to Remain: Protect construction to remain against damage and soiling during historic treatment. When permitted by Owner, items may be removed to a suitable, protected storage location during historic treatment and cleaned and reinstalled in their original locations after historic treatment operations are complete.
- D. Storage and Protection: When removed from their existing location, store historic materials within a weathertight enclosure where they are protected from wetting by rain, snow, or ground water, and temperature variations. Secure stored materials to protect from theft.

1. Identify removed items with an inconspicuous mark indicating their original location.

1.7 PROJECT-SITE CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to historic treatment area. Conduct historic treatment so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION, GENERAL

- A. Comply with manufacturer's written instructions for precautions and effects of products and procedures on adjacent building materials, components, and vegetation.
- B. Ensure that supervisory personnel are present when work begins and during its progress.
- C. Temporary Protection of Historic Materials during Construction:
 1. Protect existing materials during installation of temporary protections and construction. Do not deface or remove existing materials.
 2. Attachments of temporary protection to existing construction shall be approved by Owner's Project Team prior to installation.

3.2 PROTECTION DURING USE OF HEAT-GENERATING EQUIPMENT

- A. Comply with the following procedures while performing work with heat-generating equipment, including welding, cutting, soldering, brazing, paint removal with heat, and other operations where open flames or implements utilizing heat are used:
 1. Obtain Owner's approval for operations involving use of open-flame or welding equipment.
 - a. Notification shall be given for each occurrence and location of work with heat-generating equipment.
 2. As far as practical, use heat-generating equipment in shop areas or outside the building.
 3. Before work with heat-generating equipment commences, furnish personnel to serve as a fire watch (or watches) for location(s) where work is to be performed.
 4. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
 5. Remove and keep the area free of combustibles, including, rubbish, paper, waste, etc., within area of operations.
 - a. If combustible material cannot be removed, provide fireproof blankets to cover such materials.
 6. Where possible, furnish and use baffles of metal or gypsum board to prevent the spraying of sparks or hot slag into surrounding combustible material.
 7. Prevent the extension of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
 8. Inspect each location of the day's work not sooner than 30 minutes after completion of operations to detect hidden or smoldering fires and to ensure that proper housekeeping is maintained.

- B. Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to automatic sprinkler heads, shield the individual heads temporarily with guards.

3.3 HISTORIC TREATMENT PROCEDURES

- A. The Owner's Project Team will work with AE2 to develop the historic treatment program for this project. The appropriate restoration methods will be agreed upon and become the basis for the development of the design by AE2.
- B. The principal aim of this preservation work is to halt the process of deterioration and restore the building's condition. Repair is required in locations. The following procedures shall be followed:
 - 1. Retain as much existing material as possible; repair and consolidate rather than replace.
 - 2. Use additional material or structure to reinforce, strengthen, prop, tie, and support existing material or structure.
 - 3. Use reversible processes wherever possible.
 - 4. Use traditional replacement materials and techniques. New work shall be distinguishable to the trained eye, on close inspection, from old work.
 - 5. Record the work before the procedure with preconstruction photos and during the work with periodic construction photos. Photographic documentation is specified in Division 01 Section Photographic Documentation.
- C. Obtain Owner's Project Team review and written approval in the form of a Constructive Change Directive or Supplemental Instruction before making changes or additions to construction or removing historic materials.
- D. Notify Owner's Project Team of visible changes in the integrity of material or components whether due to environmental causes including biological attack, UV degradation, freezing, or thawing; or due to structural defects including cracks, movement, or distortion.
 - 1. Do not proceed with the work in question until directed by Owner's Project Team.
- E. Where missing features are indicated to be repaired or replaced, provide features whose designs are based on accurate duplications rather than on conjectural designs, subject to the approval of AE2 and Owner's Project Team.
- F. Where Work requires existing features to be removed, cleaned, and reused, perform these operations without damage to the material itself, to adjacent materials, or to the substrate.
- G. Identify new or replacement materials and features with inconspicuous, permanent marks to distinguish them from original materials. Record the legend of identification marks and the locations of these marks on Record Drawings.
- H. When cleaning, match samples of existing materials that have been cleaned and identified for acceptable cleaning levels. Avoid overcleaning to prevent damage to existing materials during cleaning.

END OF SECTION 013591

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control for design and construction.
- B. The Design-Builder is responsible for quality assurance and control and shall establish and maintain an effective quality assurance and control system. The quality assurance and control systems will consist of plans, procedures, and organization necessary to produce an end product, which complies with the contract requirements and the desired outcomes. The quality assurance and control systems will cover all design and construction operations, both onsite and offsite, and shall be keyed to the proposed design and construction sequence.
- C. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Design Builder of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities will be specified by AE2.
- D. Requirements for Design Builder to provide quality-assurance and -control services required by AE2, Owner's Project Team, or authorities having jurisdiction are not limited by provisions of this Section.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements.
- C. Mockups: Full-size, physical assemblies that are constructed, installed or created on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- D. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Design Builder or another entity engaged by Design Builder as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- J. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 SUBMITTALS

- A. Design Quality Control Plan: AE2 shall prepare a Design Quality Control Plan (DQC) documenting procedures to maintain the quality on this project during design and submit to Owner's Project Team for approval.
- B. Contractor Quality Control Plan: AE2 shall prepare a Contractor Quality Control Plan (CQC) documenting procedures to maintain the quality on this project during construction and submit to Owner's Project Team for approval.
- C. Schedule of Tests and Inspections: AE2 shall prepare in tabular form a list of tests and inspections required for this project and submit to Owner's Project Team for approval.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.5 REPORTING PROCEDURES

- A. Provide a list of the definable features of work. A definable feature of work is a task, which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section. This list will be agreed upon by the Design-Builder and the Owner's Project Team, during the coordination meeting.

1.6 ACCEPTANCE OF PLAN

- A. Acceptance of the Design-Builder's plans are required prior to the start of design and construction. Acceptance is conditional and will be predicated on satisfactory performance during the design and construction. The Owner's Project Team reserves the right to require the Design-Builder to make changes in his DQC and CQC Plans and operations including removal of personnel, as necessary, to obtain the quality specified.

1.7 NOTIFICATION OF CHANGES

- A. After acceptance of the DQC and CQC Plans, the Design-Builder will notify the Owner's Project Team in writing of any proposed change. Proposed changes are subject to acceptance by the State Team.

1.8 DESIGN QUALITY CONTROL PLAN

- A. The Design Builder shall also be responsible for maintaining the integrity of the design and for compliance with the contract requirements through construction and documentation of the as-built condition by coordination, review and approval of extensions of design, material, equipment and other construction submittals, review and approval or disapproval of requested deviations to the accepted design or to the contract, coordination with the Owner's Project Team of the above activities, and by performing other typical professional designer responsibilities.
- B. The Design-Builder's DQC Plan will provide and maintain an effective quality control program which will assure that all design related services required by this design-build contract are performed and provided in a manner that meets professional architectural and engineering quality standards.
- C. As a minimum, all documents will be technically reviewed by competent, independent reviewers identified in the DQC Plan. The same person(s) that produced the product will not perform the independent technical review. The Design-Builder will correct errors and deficiencies in the design documents prior to submitting them to the Owner's Project Team.
- D. The Design-Builder will include in the DQC Plan the discipline-specific checklists to be used during the design and quality control of each submittal. Submit these completed checklists at each design phase as part of the project documentation.
- E. The DQC Plan will be implemented by a Design Quality Control Manager who has the responsibility of being cognizant of and assuring that all documents on the project have been coordinated. This individual will be a person who has verifiable engineering or architectural design experience and is a registered professional engineer or architect. The Design-Builder will notify the Owner's Project Team, in writing, of the name of the individual, and the name of an alternate person assigned to the position.
- F. The Owner's Project Team will notify the Design-Builder in writing of the acceptance of the DQC Plan. After acceptance, any changes proposed by the Design-Builder are subject to the acceptance of the Owner's Project Team.

1.9 CONTRACTOR QUALITY CONTROL PLAN

- A. The Design-Builder will furnish the CQC Plan not later than thirty (30) days after receipt of notice to proceed. The plan will identify personnel, procedures, control, instructions, tests, records, and forms to be used.
- B. Where the applicable Code issued by the International Code Council calls for an inspection by the Building Official, the Design-Builder will include the inspections in the Quality Control Plan and the State of Oklahoma's Authority having Jurisdiction or the appropriate state agency will perform the inspections. The Designer of Record will develop a program for any special inspections required by the applicable International Codes and the State of Oklahoma's Authority having Jurisdiction or the appropriate state agency will perform these inspections.
- C. The CQC will include as a minimum, the following information for design and construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents subcontractors, designers of record, consultants, architect/engineers (AE), fabricators, suppliers, and purchasing agents:

1. A description of the quality control organization, including a chart showing lines of authority.
2. The name, qualifications in resume format, duties, responsibilities, and authorities of each person assigned a CQC function.
3. A copy of the letter signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC Manager, including authority to stop work which is not in compliance with the contract.
4. The CQC Manager will issue letters of direction to all other quality control representatives outlining duties, authorities, and responsibilities. Provide copies of these letters to the Owner's Project Team.

1.10 CQC MANAGER

- A. The Design-Builder will identify as CQC System Manager an individual within the onsite work organization who will be responsible for overall management of CQC and have the authority to act in all CQC matters for the Design-Builder. The CQC Manager will be a graduate engineer, graduate architect, a graduate of construction management, or an engineering technician with at least two (2) years of college and five (5) years construction experience on construction similar to this contract.
- B. This CQC System Manager will be on the site at all times during construction and will be employed by the prime Design-Builder. An alternate for the CQC System Manager will be identified in the plan to serve in the event of the System Manager's absence.

1.11 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

- G. **Factory-Authorized Service Representative Qualifications:** An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.12 TESTING

- A. **Preconstruction Testing:** Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
1. **Design Builder responsibilities include the following:**
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e. When testing is complete, remove test specimens.
 2. **Testing Agency Responsibilities:** Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Design Builder. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- B. **Mockups:** Before installing portions of the Work requiring mockups, prepare mockups demonstrating finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Assemble mockups in location and of size indicated or, if not indicated, as directed by AE2 and agreed to by Owner.
 2. Notify AE2 and Owner seven days in advance of dates and times when mockups will be installed.
 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 4. Obtain AE2's and Owner's approval of mockups before starting work, fabrication, or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.

1.13 QUALITY CONTROL

- A. **Owner Responsibilities:** Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Design Builder with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 2. Payment for these services will be made by Owner.
 3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Design Builder.
- B. Tests and inspections not explicitly assigned to Owner are Design Builder's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by

- authorities having jurisdiction. Perform quality-control services required of Design Builder by authorities having jurisdiction, whether specified or not.
1. Where services are indicated as Design Builder's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Design Builder shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 3. Where quality-control services are indicated as Design Builder's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 4. Testing and inspecting requested by Design Builder and not required by the Contract Documents are Design Builder's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. **Manufacturer's Field Services:** Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."
- D. **Retesting/Reinspecting:** Regardless of whether original tests or inspections were Design Builder's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. **Testing Agency Responsibilities:** Cooperate with AE2 and Design Builder in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify AE2 and Design Builder promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Design Builder.
 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform any duties of Design Builder.
- F. **Associated Services:** Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.

- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- H. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit schedule within 30 days of date established for the Notice to Proceed.
 - 1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.14 PUNCH-LIST INSPECTION

- A. The CQC Manager will conduct an inspection of the work. Provide a punch list of items which do not conform to the approved drawings and specifications and included in the CQC documentation. Include the estimated date by which the list deficiencies will be corrected. The CQC Manager or staff will make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Design-Builder will notify the Owner's Project Team that the facility is ready for the Pre-Final Inspection.

1.15 PRE-FINAL INSPECTION

- A. As soon as practical after the notification above, the Owner's Project Team will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Pre-Final Punch List may be developed as a result of this inspection.
- B. The Design-Builder's CQC Manager will ensure that all items on the Owner's Project Team's list have been corrected before notifying the Owner's Project Team, so that a Final Acceptance Inspection can be scheduled.
- C. Correct any items noted on the Pre-Final Inspection in a timely manner. These inspections and any deficiency corrections required by this paragraph will be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

1.16 FINAL ACCEPTANCE INSPECTION

- A. The Design-Builder's Quality Control Inspection personnel, plus the superintendent or other primary management person, Owner's Project Team's Representatives will be in attendance at the Final Acceptance Inspection.
- B. The Final Acceptance Inspection will be formally scheduled by the Design-Builder based upon results of the Pre-Final Inspection. Provide at least fourteen (14) days notice to the Owner's Project Team prior to the Final Acceptance Inspection. Include the Design-Builder's assurance that all specific items previously identified to the Design-Builder as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Once this inspection is complete and the facility has been accepted, the facility will be considered "Substantially Complete," thus starting all warranty periods.

1.17 NOTIFICATION OF NONCOMPLIANCE

- A. The Owner's Project Team will notify the Design-Builder of any detected noncompliance with the foregoing requirements. The Design-Builder will take immediate corrective action after receipt of such notice. Such notice, when delivered to the Design-Builder at the work site, will be deemed sufficient for the purpose of notification. If the Design-Builder fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the work until satisfactory

corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time or for excess costs or damages by the Design-Builder.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
 - 2. Comply with the Contract Document requirements for Division 01 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Design Builder's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 015002 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the GMP. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's Project Team, testing agencies, and authorities having jurisdiction.
- B. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.76-mm-) thick, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts.
- B. Gypsum Board: Minimum 1/2 inch (12.7 mm) thick by 48 inches (1219 mm) wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M.
- C. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

D. Paint: Sufficient for task.

2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of construction personnel. Keep office clean and orderly. Furnish and equip offices as follows:
 - 1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.
 - 2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with not less than 1 receptacle on each wall. Furnish room with conference table, chairs, and 4-foot- (1.2-m-) square tack board.
 - 3. Drinking water and private toilet.
 - 4. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F (20 to 22 deg C).
 - 5. Lighting fixtures capable of maintaining average illumination of 20 fc (215 lx) at desk height.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Location of facilities will be subject to approval by Owner. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Division 01 Section "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
 - 1. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- D. Heating: Provide temporary heating required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures

or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

- E. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
 - 1. Connect temporary service to Owner's existing power source, as directed by Owner.
- F. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- G. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.
 - 1. At each telephone, post a list of important telephone numbers.
 - a. Police and fire departments.
 - b. Ambulance service.
 - c. Design Builder's home office.
 - d. AE2's office.
 - e. Owner's office.
 - f. Principal subcontractors' field and home offices.
 - 2. Provide superintendent with cellular telephone for use when away from field office.
- H. Electronic Communication Service: Provide temporary electronic communication service, including electronic mail, in common-use facilities.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide incombustible construction for offices and sheds located within construction area. Comply with NFPA 241.
 - 2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- C. Project Identification and Temporary Signs: Provide Project identification and other signs. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.
 - 1. Provide temporary, directional signs for construction personnel and visitors.
 - 2. Maintain and touchup signs so they are legible at all times.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

- C. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- D. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide Owner with one set of keys.
- E. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- F. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- G. Covered Walkway: Erect structurally adequate, protective, covered walkway for passage of individuals along public routes to active entrances and exits. Coordinate with obstructions. Comply with regulations of authorities having jurisdiction.
- H. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
- I. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner and tenants from fumes and noise.
 - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side. Insulate partitions to provide environmental separation and noise protection to occupied areas. Seal joints and perimeter
- J. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
- C. Operate Project-identification-sign lighting daily from dusk until 12:00 midnight.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Design Builder. Owner reserves right to take possession of Project identification signs.
2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
 - 1. Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.

1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1. Coordinate product list with Design Builder's Construction Schedule and the Submittals Schedule.
 - 2. Form: Tabulate information for each product under the following column headings:
 - a. Specification Section number and title.
 - b. Generic name used in the Contract Documents.

- c. Proprietary name, model number, and similar designations.
 - d. Manufacturer's name and address.
 - e. Supplier's name and address.
 - f. Installer's name and address.
 - g. Projected delivery date or time span of delivery period.
 - h. Identification of items that require early submittal approval for scheduled delivery date.
3. Initial Submittal: Within 30 days after date of commencement of the construction work, submit 3 copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - a. At Design Builder's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.
 4. Completed List: Within 60 days after date of commencement of the construction work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 5. Owner's Project Team's Action: Owner's Project Team's will respond in writing to Design Builder within 15 days of receipt of completed product list. Owner's Project Team's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Owner's Project Team's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Substitution Request Form: Use form provided by Owner.
 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Design Builder's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.

- j. Cost information, including a proposal of change, if any, in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - l. Design Builder's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Owner's Project Team's Action: If necessary, Owner's Project Team will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Owner's Project Team will notify Design Builder of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
- a. Form of Acceptance: Change Order.
 - b. Use product specified if Owner's Project Team cannot make a decision on use of a proposed substitution within time allocated.
- C. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Owner's Project Team's Action: If necessary, Owner's Project Team will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Owner's Project Team will notify Design Builder of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
- a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
 - b. Use product specified if Owner's Project Team cannot make a decision on use of a comparable product request within time allocated.
- D. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If subcontractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
- 1. Each subcontractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Design Builder will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
- 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.

3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.
8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

1. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 2. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 3. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.

3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," Owner's Project Team will make selection.
 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
 7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
 3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
 4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
 6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
 7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
 8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
 9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Design Builder's sample. Owner's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
 10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Owner will select color, pattern,

density, or texture from manufacturer's product line that does not include premium items.

- b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Design Builder will consider requests for substitution if received within 60 days after commencement of the construction work. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Design Builder will consider Subcontractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Owner will return requests without action, except to record noncompliance with these requirements:
 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Design Builder for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 2. Requested substitution does not require extensive revisions to the Contract Documents.
 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 4. Substitution request is fully documented and properly submitted.
 5. Requested substitution will not adversely affect Design Builder's Construction Schedule.
 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
 7. Requested substitution is compatible with other portions of the Work.
 8. Requested substitution has been coordinated with other portions of the Work.
 9. Requested substitution provides specified warranty.
 10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

2.3 COMPARABLE PRODUCTS

- A. Conditions: Owner's Project Team will consider Design Builder's and subcontractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 3. Evidence that proposed product provides specified warranty.
 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. General installation of products.
 - 2. Progress cleaning.
 - 3. Protection of installed construction.
 - 4. Correction of the Work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
 - 1. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- C. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

- D. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.3 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F (27 deg C).
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.4 ADJUSTING

- A. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.6 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017329 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.4 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 - 3. Dates: Indicate when cutting and patching will be performed.
 - 4. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
 - 5. Owner's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.5 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include the following:
 - 1. Water, moisture, or vapor barriers.
 - 2. Membranes and flashings.
 - 3. Equipment supports.
 - 4. Piping, ductwork, vessels, and equipment.
- C. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

- D. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size

- required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 017329

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous demolition and construction waste.
 - 2. Recycling nonhazardous demolition and construction waste.
 - 3. Disposing of nonhazardous demolition and construction waste.

1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE GOALS

- A. Salvage/Recycle Goals: Owner's goal is to salvage and recycle as much nonhazardous demolition and construction waste as possible.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 WASTE MANAGEMENT IMPLEMENTATION

- A. General: Implement waste management plan as approved by Owner. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management during the entire duration of the Contract.
- B. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

3.2 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

A. General: Design Builder shall try to recycle paper and beverage containers.

B. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.

1. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.3 DISPOSAL OF WASTE

A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn waste materials.

C. Disposal: Transport waste materials off Owner's property and legally dispose of them.

END OF SECTION 017419

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
- B. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 3. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
 - 6. Complete final cleaning requirements, including touchup painting.
 - 7. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Submit a final Application for Payment.
 - 2. Submit certified copy of AE2's Substantial Completion inspection list of items to be completed or corrected (punch list). The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

1.5 WARRANTIES

- A. Submittal Time: Submit written warranties for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- C. Provide additional copies of each warranty to include in maintenance manuals.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Remove debris and surface dust from limited access spaces, including roofs, attics, and similar spaces.
 - g. Clean transparent materials, including glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - j. Replace disposable air filters and clean permanent air filters where affected by the work. Clean exposed surfaces of diffusers, registers, and grills.
 - k. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by

hours of use, and defective and noisy starters to comply with requirements for new fixtures.

- I. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

3.2 CLOSEOUT PROCEDURES

- A. Make submittals that are required by the State of Oklahoma and the Contract Documents.
- B. Notify AE2 when work is considered ready for Substantial Completion.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for AE2's inspection. Provide a comprehensive list ("Punch List") of items to be corrected in a manner that affords a logical walk-through method of verification (room-to-room).
 1. If AE2's inspection discloses any item not in accordance with the requirements of the Contract Documents, or a lengthy list of items not included on the Design Builder's Punch List, the Certificate of Substantial Completion shall not be issued until such time the work is brought into compliance.
 2. If AE2's inspection concludes the project is substantially complete, the Punch List will be affixed to and the Certificate of Substantial Completion issued.
- D. Proceed promptly to complete and correct items of work on Punch List and comply with requirements for access to Owner-occupied areas.
- E. Notify AE2 when work is considered finally complete.
- F. Complete items of work determined by AE2's final inspection.

END OF SECTION 017700

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Emergency manuals.
 - 3. Operation manuals for systems, subsystems, and equipment.
 - 4. Maintenance manuals for the care and maintenance of products, materials, and finishes, systems and equipment.
- B. Related Sections include the following:
 - 1. Division 01 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
 - 2. Division 01 Section "Closeout Procedures" for submitting operation and maintenance manuals.
 - 3. Division 01 Section "Project Record Documents" for preparing Record Drawings for operation and maintenance manuals.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 SUBMITTALS

- A. Initial Submittal: Submit 2 draft copies of each manual at least 15 days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Owner's Project Team will return one copy of draft and mark whether general scope and content of manual are acceptable.
- B. Final Submittal: Submit one copy of each manual in final form at least 15 days before final inspection. Owner's Project Team will return copy with comments within 15 days after final inspection.
 - 1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Owner Project Team's comments.

1.5 COORDINATION

- A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents.

2.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address, and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

- a. Organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
 4. Supplementary Text: Prepared on 8-1/2-by-11-inch (215-by-280-mm) white bond paper.
 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
 1. Type of emergency.
 2. Emergency instructions.
 3. Emergency procedures.
 4. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
 5. Fire.
 6. Flood.
 7. Gas leak.
 8. Water leak.
 9. Power failure.
 10. Water outage.
 11. System, subsystem, or equipment failure.
 12. Chemical release or spill.
- B. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- C. Emergency Procedures: Include the following, as applicable:
 1. Instructions on stopping.
 2. Shutdown instructions for each type of emergency.
 3. Operating instructions for conditions outside normal operating limits.
 4. Required sequences for electric or electronic systems.
 5. Special operating instructions and procedures.

2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

1. System, subsystem, and equipment descriptions.
 2. Performance and design criteria if Contractor is delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
1. Product name and model number.
 2. Manufacturer's name.
 3. Equipment identification with serial number of each component.
 4. Equipment function.
 5. Operating characteristics.
 6. Limiting conditions.
 7. Performance curves.
 8. Engineering data and tests.
 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Instructions on stopping.
 6. Normal shutdown instructions.
 7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.
 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.5 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
1. Product name and model number.
 2. Manufacturer's name.
 3. Color, pattern, and texture.
 4. Material and chemical composition.

5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 1. Inspection procedures.
 2. Types of cleaning agents to be used and methods of cleaning.
 3. List of cleaning agents and methods of cleaning detrimental to product.
 4. Schedule for routine cleaning and maintenance.
 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 1. Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 1. Standard printed maintenance instructions and bulletins.
 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 3. Identification and nomenclature of parts and components.
 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 1. Test and inspection instructions.
 2. Troubleshooting guide.
 3. Precautions against improper maintenance.
 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 5. Aligning, adjusting, and checking instructions.
 6. Demonstration and training videotape, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared Record Drawings in Division 01 Section "Project Record Documents."
- G. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.

1.3 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit electronic copies of Record Drawings as follows:
 - a. Submit one set of marked-up Record Prints in PDF format and one set of Record CAD Drawing files.
- B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications in PDF format.
- C. Record Product Data: Submit one copy of each Product Data submittal in PDF format.
 - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.
- D. Submit all Record Drawings, Specifications and Data in electronic format on a CD-R or thumb drive storage medium.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints:
 - 1. Mark Record Prints to show the actual installation where installation varies from that shown originally.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Content: Types of items requiring marking include, but are not limited to, the following:
 - d. Dimensional changes to Drawings.
 - e. Revisions to details shown on Drawings.
 - f. Locations and depths of underground utilities.
 - g. Changes made by Change Order.
 - h. Changes made following AE2's written orders.
 - i. Details not on the original Contract Drawings.
 - j. Field records for variable and concealed conditions.
 - k. Record information on the Work that is shown only schematically.

2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 3. Use different colors to distinguish between changes for different categories of the Work at same location.
 4. Mark important additional information that was either shown schematically or omitted from original Drawings.
 5. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
 6. Paragraph and subparagraphs below describe a procedure for assembling nearly correct reproducible Drawings. Add requirements for special printing methods on specific material, such as moisture-sensitive prints on mylar film. Delete if not required.
- B. Record CAD Drawings: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with AE2. Prepare a full set of corrected CAD Drawings of the Contract Drawings, as follows:
1. Format: DWG, current version, operating in Microsoft Windows operating system.
 2. Incorporate changes and additional information previously marked on Record Prints. Delete, redraw, and add details and notations where applicable.
 3. Refer instances of uncertainty to AE2 for resolution.
 4. CAD Software Program: AutoCad, current version.
- C. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.
 5. Note related Change Orders and Record Drawings where applicable.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes.

END OF SECTION 017839

SECTION 017900 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.
 - 3. Demonstration and training videotapes.
- B. Related Sections include the following:
 - 1. Division 01 Section "Project Management and Coordination" for requirements for preinstruction conferences.
- C. Unit Price for Instruction Time: Length of instruction time will be measured by actual time spent performing demonstration and training in required location. No payment will be made for time spent assembling educational materials, setting up, or cleaning up.

1.3 SUBMITTALS

- A. Instruction Program: Submit two copies of outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. At completion of training, submit one complete training manual(s) for Owner's use.
- B. Attendance Record: For each training module, submit list of participants and length of instruction time.
- C. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.
- D. Demonstration and Training Videos: Submit two copies within seven days of end of each training module.
 - 1. Identification: On each copy, provide an applied label with the following information:
 - a. Name of Project.
 - b. Name and address of photographer.
 - c. Name of Architect.
 - d. Name of Design Builder.
 - e. Date video was recorded.
 - f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - 2. Transcript: Prepared on 8-1/2-by-11-inch (215-by-280-mm) paper, punched and bound in heavy-duty, 3-ring, vinyl-covered binders. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding video. Include name of Project and date of video on each page.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Division 01 Section "Quality Requirements," experienced in operation and maintenance procedures and training.
- C. Preinstruction Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to demonstration and training including, but not limited to, the following:
 - 1. Inspect and discuss locations and other facilities required for instruction.
 - 2. Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed to avoid delays.
 - 3. Review required content of instruction.
 - 4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections, and as follows:
 - 1. Fire-protection systems, including fire alarm, fire pumps and fire-extinguishing systems.
 - 2. Security systems.
 - 3. Elevators and wheelchair lifts.
 - 4. Heat generation, including boilers, pumps and water distribution piping.
 - 5. Refrigeration systems, including chillers, cooling towers, pumps and distribution piping.
 - 6. HVAC systems, including air-handling equipment, air distribution systems and terminal equipment and devices.
 - 7. HVAC instrumentation and controls.
 - 8. Electrical service and distribution, including transformers, switchboards, panelboards, uninterruptible power supplies and motor controls.
 - 9. Packaged engine generators, including transfer switches.
 - 10. Lighting equipment and controls.
 - 11. Communication systems, including surveillance, clocks and programming, voice and data and television equipment.

- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:
1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project Record Documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages.
 - b. Instructions on stopping.
 - c. Shutdown instructions for each type of emergency.
 - d. Operating instructions for conditions outside of normal operating limits.
 - e. Sequences for electric or electronic systems.
 - f. Special operating instructions and procedures.
 4. Operations: Include the following, as applicable:
 - a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - l. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
 5. Adjustments: Include the following:
 - a. Alignments.
 - b. Checking adjustments.
 - c. Noise and vibration adjustments.
 - d. Economy and efficiency adjustments.
 6. Troubleshooting: Include the following:
 - a. Diagnostic instructions.
 - b. Test and inspection procedures.

7. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
8. Repairs: Include the following:
 - a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - d. Instructions for identifying parts and components.
 - e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.
- B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Design Builder and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 1. Owner will furnish Design Builder with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 1. Schedule training with Owner with at least seven days' advance notice.
- D. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a demonstration performance-based test.
- E. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

3.3 DEMONSTRATION AND TRAINING VIDEOS

- A. General: Engage a qualified commercial photographer to record demonstration and training videos. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
 1. At beginning of each training module, record each chart containing learning objective and lesson outline.
- B. Video Format: Provide high-quality video on electronic media.

- C. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to show area of demonstration and training. Display continuous running time.
- D. Narration: Describe scenes on video by audio narration by microphone while video is recorded. Include description of items being viewed. Describe vantage point, indicating location, direction (by compass point), and elevation or story of construction.
- E. Transcript: Provide a typewritten transcript of the narration. Display images and running time captured from video opposite the corresponding narration segment.

END OF SECTION 017900

ATTACHMENT 1 – OWNER’S PROJECT TEAM INVESTIGATIONS

- 1.1 The Existing Structure Seismic Evaluation Report will be issued by addenda.