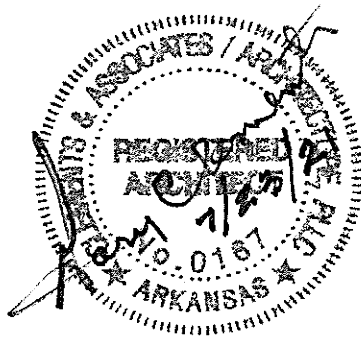


# **PROJECT MANUAL**

**(REBID)  
REPAIRS AND IMPROVEMENTS  
TO THE  
JACOB WOLF HOUSE HISTORIC SITE  
13775 HIGHWAY 5  
NORFORK, ARKANSAS**

**DBA PROJECT #8652102R**



**July 13, 2021**

**CLEMENTS & ASSOCIATES/ARCHITECTURE, INC.  
507 MAIN STREET  
NORTH LITTLE ROCK, ARKANSAS 72114  
(501) 375-3380  
[www.clementsarchitects.com](http://www.clementsarchitects.com)**



**(REBID)**  
**REPAIRS AND IMPROVEMENTS**  
**TO THE JACOB WOLF HOUSE HISTORIC SITE**  
**13775 HIGHWAY 5**  
**NORFORK, ARKANSAS**

**DBA PROJECT # 8652102R**

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**INVITATION TO BID**  
**Section 00 11 16 / Rev: April 2021**

Clements & Associates/Architecture, Inc.	Repairs and Improvements to the Jacob Wolf House Historic Site
507 Main Street	DBA Project #: 8652102R
North Little Rock, Arkansas 72114	Owner/Agency: ADPHT - AHPP
501-375-3380	

- 1) You are invited to bid on a General Contract for the:  
Construction of: Repairs and Improvements to the Jacob Wolf House Historic Site  
Located At: 13775 Highway 5 South, Norfolk, Arkansas 72658  
Project Owner: ADPHT - AHPP  
Bid Type: Lump Sum Basis: Lowest Responsive and Responsible Bidder
- 2) There will be a Mandatory Pre-Bid Conference  
Date: Friday, August 6, 2021  
Time: 11:00 a.m.  
Location: 13775 Highway 5 South, Norfolk, Arkansas 72658

The State reserves the right to schedule future meetings.

Bids received from any bidder failing to attend any mandatory meeting(s) shall be declared non-responsive.

- 3) The Owner will receive bids until:  
Date: Tuesday, August 17, 2021  
Time: 2:30 p.m.  
Location: Division of Building Authority 501 Woodlane, Suite 101N Little Rock, Arkansas 72201

Sealed bids may be mailed or delivered to the above address. Bids received after the date and time stated in the solicitation and will not be considered. Bids will be publicly opened and read aloud at the time and date mentioned. Interested parties are invited to attend. The Division of Building Authority, hereinafter termed DBA, unless designated to another entity, supervises the bidding and award of all construction contracts, approves contract change orders, request for final payment and ensures on-site observations are accomplished.

- 4) Obtaining contract documents through any source other than the Design Professional listed above or their representative(s) is not advisable due to the risks of receiving incomplete or inaccurate information. Contract documents obtained through the Design Professional or their representative(s) are considered the official version and take precedence should any discrepancies occur. The official version of the complete set of the contract documents should be examined and are obtainable from:  
Southern Reprographics, 901 West 7th Street, Little Rock, Arkansas 72201; 501-372-4011.

- 5) Bid document deposit and refund information:

Prime Bidders will be provided One (1) set of bidding documents by depositing a check in the amount of \$100.00 per set, payable to Clements & Associates/Architecture, Inc. Deposits will be refunded to all prime bidders who return bidding documents in good condition within ten (10) days after the opening of bids. A bidder receiving a contract award may retain the bidding documents and the Bidder's deposit will be refunded. Prime Bidders and Sub-bidders requiring digital or additional sets may purchase bidding documents through Southern Reprographics at the Bidder's expense. No partial sets will be issued.

- 6) While contract documents can be examined at the following plan room(s), bidders should use caution in doing so:
- 7) Bid Security in the amount of five (5) percent of the bid must accompany each bid in accordance with the Instructions to Bidders.
- 8) Bidders are hereby notified that any bidder who desires to enter into Contract for this work must comply with disclosure requirements pursuant to Governor Executive Order 98-04. Submission to the Owner and DBA of the completed Disclosure (DBA 00 73 73) form will be a condition of the Contract. The Owner cannot enter into any contract nor can DBA approve any contract, which does not obligate the Contractor to require the submission of Disclosure (DBA 00 73 73) forms for subcontracts exceeding \$25,000.
- 9) Bidders are hereby notified that prevailing wage rates will not apply
- 10) The State reserves the rights to reject any and all bids, and to waive any formalities. Bidders shall conform to the requirements of the Arkansas licensing laws and regulations for contractors, and shall be licensed before his bid is submitted unless the project is federally funded pursuant to Arkansas Code Annotated § 17-25-315.
- 11) Pursuant to Ark. Code Ann. § 22-9-203, the State encourages all small, minority, and women business enterprises to submit bids for capital improvements. Encouragement is also made to all general contractors that in the event they subcontract portions of their work, consideration is given to the identified groups.
- 12) Pursuant to Ark. Code Ann. § 19-11-105, the lowest responsible bidder shall certify prior to executing the contract that they do not employ or contract with any illegal immigrants. Bidders shall certify online at: <https://www.ark.org/dfa/immigrant/index.php/user/login>
- 13) Bidders are responsible to adhere to the guidelines established for state operated buildings. Face coverings should be worn upon entering the facility and whenever moving through common areas (lobbies, elevators, stairs, restrooms, meetings and hallway/corridors). Bidders without a face covering may be denied access at the point of entry. Due to social distancing requirements and health/safety concerns, prompt entrance to the building may not occur therefore, Bidders should be prepared for any delays into the building for a timely bid submittal.

**To:** All Bidders  
**From:** Division of Building Authority, Construction Section  
**Re:** Common Bidding Mistakes  
**Date:** 4/1/2017

The following list\* are the eleven most common mistakes which occur in the bid submittal process and result in bid rejections.

- 1) Not listing the Subcontractor's name or the Contractors name (Mechanical, Plumbing, Electrical, Roofing) in the space provided on the bid form.*
- 2) The listed Subcontractor's is unlicensed to do the listed work.*
- 3) Bid Bond is not signed by a resident / non resident agent licensed within Arkansas.*
- 4) Addenda are not acknowledged by the Contractor on the Bid Form.*
- 5) Failure to submit any bid security or the issuing surety company for the Bid Bond is not qualified and authorized to do business within the State and is not listed on the current United States Department of the Treasury's listing of approved sureties.*
- 6) Bid Bond or Bid Form is not signed by the Contractor or Contractors representative.*
- 7) Expired Contractor's license or is misclassified for the work.*
- 8) Bid Bond not accompanied by the Agent's Power of Attorney, or the name of the resident / non resident agent is not shown on the Power of Attorney.*
- 9) Bid Security (Bid Bond or Cashiers Check) made out to the wrong entity (Obligee or Payee), the bid security must be made out to the Owner.*
- 10) Failure to submit attachments, such as unit prices, with the bid form, if required by the bid documents.*
- 11) Bidder fails to initial any revised entries on the submitted bid form. All changes shall be made by striking through the wrong entry and the corrected entry shall be inserted on the Bid Form and initialed.*

\*This is NOT an all inclusive checklist and is only being provided as informational assistance to bidders. Bidders should become familiar with all the bid documents, procedures, rules and laws governing bid submittals and state contracting processes.



**INSTRUCTIONS TO BIDDERS**  
**Section 00 21 13 / Rev: April 2021**

1. **BIDDING DOCUMENTS.** Bidders may obtain complete sets of Contract Documents from issuing office designated in the Invitation to Bid. Complete sets of Contract Documents must be used in preparing bids; neither Owner nor Design Professional assume responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents. Obtaining Contract documents through any source other than the Design Professional listed in the Invitation to Bid is not advisable due to the risks of receiving incomplete or inaccurate information, and the bidder runs the risk of basing bidder's proposal on such information. The documents obtained through the Design Professional or his representative(s) or DBA are considered the official version and take precedence if any discrepancies occur. The fact that documents used for bidding purposes are named "contract documents" does not diminish in any way the right of the State to reject any and all bids and to waive any formality.
  
2. **EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK.** Bidder shall examine the Contract Documents and visit the project site of work. Bidder shall become familiar with all existing conditions and limitations under which the Work is to be performed, and shall base bid on items necessary to perform the Work as set forth in the Contract Documents. Failure to do so is at the sole risk of the bidder. No allowance will be made to Bidder because of lack of such examination or knowledge. The submission of a Bid shall be construed as conclusive evidence that the Bidder has made such examination.
  
3. **INTERPRETATION OF CONTRACT DOCUMENTS DURING BIDDING.**
  - 3.1 All references to the Owner shall be interpreted to mean the Agency for whom the work is being contracted.
  
  - 3.2 If any person contemplating submitting a Bid is in doubt as to the true meaning of any part of the Contract Documents or finds discrepancies in or omissions from any part of the Contract Documents, he may submit to the Design Professional a written request for an interpretation or correction thereof not later than five (5) calendar days before Bid opening. In those instances where a Design Professional is not involved with the project, written requests for interpretation or correction may be made to the DBA Construction Section within the time frame stated above. Bidders shall not make additions, notations, clarifications, reservations, or exceptions to the bid form proposal or include additional documents regarding additions, notations, clarifications, reservations, or exceptions. See also # 6.1. Segregated bids, alternate bids or assignments ("additions") shall not be considered. The reading of a bid is not inclusive of the Bidder's additions, notations, clarifications, reservations, or exceptions and shall not change the Bidder's responsibilities and duties to provide all labor, materials, services and equipment necessary for, or incidental to, the construction of the project pursuant to the contract documents, including the time set forth and the lump sum base bid stated in the bid proposal.

- 3.3 Address all communications regarding the Contract Documents to the Design Professional.

In those instances where a Design Professional is not involved, address all such communications to DBA Construction Section, 501 Woodlane, Suite 101N, Little Rock, AR 72201 (501-682-1833).

- 3.4 Interpretation or correction of the Contract Documents will be made only by Addendum and will be issued by fax transmission to, hand delivered to, electronic notification to or picked up by potential bidders who received plans and specifications from the official plan distribution entity. The Design Professional shall be responsible for issuance of all addenda and documentation relating to its issuance (not receipt). In those instances where a Design Professional is not involved, the DBA Construction Section shall distribute Addenda in the above referenced manner. Bidders are responsible for verifying if any Addenda were issued prior to bid submittal. The State will not be responsible for oral explanations or interpretation of the Contract Documents.

- 3.5 Addenda issued during the bidding period will be incorporated into the Contract Documents.

#### **4. SUBSTITUTIONS.**

- 4.1 Materials, products, and equipment described in the Contract Documents establish a standard of required function and a minimum desired quality or performance level, or other minimum dimensions and capacities, to be met by any proposed substitution. Acceptability of substitutions will not be considered during bidding period.

- 4.2 In some cases, prior approval of material or equipment, or both shall be obtained from Owner in order to obtain the desired color, size, visual appearance, and other features specified.

#### **5. TYPE OF BID.**

- 5.1 The Work under this Contract will be awarded under a stipulated sum contract to the lowest responsive and responsible base bid amount. No segregated bids, alternate bids, or assignments will be considered.

- 5.2 The estimate of quantities is approximate only and shall be the basis for receiving unit price bids for each item, but shall not be considered by the Bidder as the actual quantities that may be required for the completion of the proposed work. Bidder shall state a unit price for every item of work named in the Proposal. Bidder shall include, in the unit prices, furnishing of labor, materials, tools, equipment, and apparatus of every description to construct, erect, and finish the Work. The unit price bid for the items shall be shown numerically and in the appropriate spaces provided on the Bid Form. Such figures shall be clear and distinctly legible so that no question can arise as to their intent or meaning. Unit price bids and totals shown in the Bid Form shall not include costs of engineering, advertising, printing and appraising.

**6. PREPARATION OF BID.**

- 6.1 Bid shall be made on an unaltered Bid Form identical to the form included with the Contract Documents. Fill in all blank spaces and submit one original. Bidders shall not strike through or add language to the bid form unless Bidders are modifying language previously inserted by the bidders themselves. Bidders should contact the DBA Construction Section for questions or concerns regarding the bid form. If this solicitation requires bidding on all items, failure to do so will disqualify the bid. Bidder shall furnish all information required by the solicitation and bid documents. Bids shall be signed with name printed below the signature. The Contractor's license number issued by the Contractors Licensing Board shall be placed on the Bid Form whenever the total project amount is \$50,000 or more.

Where Bidder is a corporation, bids shall be signed with the legal name of the corporation and the signature of an authorized officer of the corporation. Bids signed by an agent shall be accompanied by evidence of that agent's authority. The name of the state of incorporation, contractor's license number issued by the Contractors Licensing Board should be listed. Bids submitted by contractors who are not properly licensed shall be rejected.

- 6.2 Bids submitted by a "Joint Venture/Joint Adventure" shall be signed by representatives of each component part of the Joint Venture/Joint Adventure. The licenses of each component part of the Joint Adventure should also be listed in the bid submittal. Therefore, joint adventure bidders shall indicate at least two (2) signatures and should indicate two (2) licenses numbers on the Bid Form. Exception: Joint Ventures who have been properly licensed with the Arkansas Contractors Licensing Board as a "Joint Venture" need only to indicate the joint venture license number on the Bid Form. Joint Venture Bidders shall indicate at least two (2) signatures on the bid form even if they are licensed as a joint venture.
- 6.3 Bidder shall not enter into an agreement for any portion of the Work (services, materials, supplies, equipment, etc.) throughout the term of the Contract with any design professional (or firm) who is under contract to the Owner to provide administration of the Contract.

**7. BID GUARANTEE AND BONDS.**

- 7.1 Each bid proposal shall include a bid security in the amount of five percent of the total bid offered, if the bid is in excess of \$35,000.00. The bidder will be required to submit a bid security, which includes enclosing a cashiers check payable to the order of the OWNER drawn upon a bank or trust company doing business in Arkansas or by a corporate bid bond in an amount equal to five (5) percent of the bid. The bidder shall include in the bid the bid bond amount so that the bid represents the total cost to the Owner of all work included in the contract. Bid bonds shall be made by a surety company qualified and authorized to do business in the State of Arkansas and are listed on the current United States Department of the Treasury's listing of approved sureties. The bid bond shall be executed by a resident or non-resident agent who is licensed by the Arkansas Insurance Commissioner to represent the surety company executing the bond. The agent shall file a power of attorney to act on the behalf of the bonding company with the bid bond. Bidders may utilize a DBA Bid Bond form, however they are not required to do so; other bid bond formats are acceptable.

In any event, regardless of the type of bid security or the format of the bid bond chosen by the Bidder, failure to submit a valid bid security in accordance with Arkansas laws and regulations, including a power of attorney with the bid bond, shall render the bidders proposal void.

- 7.2 The bid security shall indemnify the Owner against failure of the Contractor to execute and deliver the contract and necessary bond (Performance and Payment Bond) for faithful performance of the contract. The bid security shall provide that the contractor or surety must pay the damage, loss, cost and expense subject to the amount of the bid security directly arising out of the Contractor's default in failing to execute and deliver the contract and bonds.
- 7.3 Owner will have the right to retain the bid security of bidders to whom an award is being considered until the Contract has been executed and bonds if required, have been furnished, or until specified time has elapsed so that bids may be withdrawn, or all bids have been rejected.
- 7.4 Failure to execute the Contract and file an acceptable full payment and performance bond and proof of insurance within the time frame as stated in 6(b) of Section 00 41 13 Bid Form after the intent to award has been issued to the bidder shall be just cause for the cancellation of the award and forfeiture of the bid security, which shall become the property of the agency, not as a penalty but in liquidated damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be rebid and constructed under contract or otherwise as the State determines. The responsible low bidder who fails to execute the Contract and submit an acceptable payment and performance bond and proof of insurance will not be permitted to bid on any subsequent advertisement of that project.
8. **PERFORMANCE AND PAYMENT BOND.** Performance and Payment Bonds are not required for bids \$35,000.00 or under, except for roofing projects. For work exceeding \$35,000.00, the Contractor shall furnish a Performance and Payment Bond in the amount equal to 100 percent of contract price, on a form identical to the Performance and Payment Bond Form included with the Contract Documents as security for faithful performance of the Contract and payment of all obligations arising thereunder within the time frame as stated in 6(b) of Section 00 41 13 Bid Form after receipt of the Intent to Award. The bond shall be executed by a surety company qualified and authorized to do business in the State of Arkansas and are listed on the current United States Department of the Treasury's listing of approved sureties. The bond shall be executed by a resident or non-resident agent licensed by the State Insurance Commissioner, to represent the surety company and the agent shall file with the bond the power of attorney of the agent to act on behalf of the bonding company. The bond shall be written in favor of the Owner. Contractor shall file the bond with the Circuit Clerk in the county where the Work is to be performed.

Failure to deliver said bonds, as specified, shall be considered as having abandoned the Contract and the bid security will be retained as liquidated damages. The bidder shall include in the bid the Performance and Payment bond amount so that the bid represents the total cost to the Owner of all work included in the contract.

9. **LISTING OF SUBCONTRACTORS.**

- 9.1 **LISTING OF SUBCONTRACTORS.** Name of principal Subcontractors or Prime Contractor (Mechanical {HVACR}, Plumbing, Electrical and Roofing) shall be listed where indicated on the Bid Form in accordance with Ark. Code Ann. § 22-9-204 and the contract documents. All prime contractors, as a condition to perform construction work for and in the State of Arkansas, shall use no other Subcontractors, including his own forces when the Subcontractor's portion of the project is \$50,000.00 or more, except those qualified and licensed by the Contractors Licensing Board in Mechanical (HVACR), Plumbing, Electrical and Roofing. Those principal Subcontractors or Prime Contractor listed in these spaces must be properly licensed for the listed work performed as determined by the Contractors Licensing Board (CLB). The bidder must also be properly licensed and use licensed Subcontractors for all other Work performed on or for the project that totals \$50,000 dollars or more as classified and determined by the CLB.

A bidder should request clarification from the Design Professional (or from DBA Construction Section, if no Design Professional exists for the project), if the bidder determines a type of work (mechanical – indicative of HVACR; electrical; plumbing; roofing) is a component of the project, but space has not been provided on the bid form for the listing of such, if the bid form lists a type of Work that is not a component of the project or if the bidder has any question on how to fill out the proposal with respect to the listing of subcontractors. Clarification should be made in accordance with Instruction 3.2.

- 9.1.1 The Prime Contractor must make a decision as to which (mechanical –indicative of HVACR; electrical; plumbing; roofing) subcontractor or his own forces he intends to use for each principal discipline of work. The prime contractor shall place the name(s) of each subcontractor or his own forces he intends to perform the Work in the space provided on the Bid Form and indicate whether the amount of the listed Work is \$50,000.00 or more. The prime contractor and/or the subcontractor listed on the bid form must be properly licensed by the Contractors Licensing Board (CLB) for any principal Work (mechanical –indicative of HVACR; electrical; plumbing; roofing), as well as any other proposed Work on the project.

If a Contractor or Subcontractor needs license classification guidance or wishes to verify classifications and/or licensees of subcontractors or their own forces they should contact the CLB prior to submitting the bid. If the bid form has a space for the prime contractor to list which subcontractor(s) or his own forces he intends to utilize to accomplish the disciplines of mechanical, electrical, plumbing, and/or roofing, the bidder must fill in the said blank space with the name of the contractor/subcontractor that will perform this work. Failure to complete the form correctly shall cause the bid to be declared non-responsive, and the bid will not receive consideration.

- 9.1.2 It shall be mandatory that any subcontractors listed on the Bid Form by the Prime Contractor are awarded a contract under Ark. Code Ann. § 22-9-204. Prime Contractors who submit a bid listing unlicensed subcontractors or use unlicensed subcontractors on a state project or any subcontractor not licensed by the Contractors Licensing Board who perform Work having a value of \$50,000.00 or more on a state project are subject to the Contractors Licensing Board.

9.2 License Requirement

a. No person shall perform Work on the contract without possessing the applicable Arkansas State License for the Work they are performing from the appropriate governing Boards. Apprentices will be appropriately supervised according to the State governing Boards requirements.

b. All licensed craftsman shall have a copy of their license with them and shall be required to provide it to a DBA or Owner Representative upon request.

9.3 Pursuant to Ark. Code Ann. § 22-9-404, the Bidder may require subcontractors to provide a Performance and Payment Bond to the Bidder when the Subcontractor is the selected for their portion of the Work. If the Contractor requires a Subcontractor to furnish a Performance and Payment Bond, the Subcontractor shall be entitled to payment of ninety-five (95) percent of the earned progress payments when due, with the Contractor retaining five (5) percent to assure faithful performance of the construction subcontract. Upon the approval of the Contractor, if the Subcontractor completes fifty (50) percent of the construction subcontract the Contractor shall not retain any further monies.

10. **SUBMITTAL.** Submit bid on the Bid Form in an opaque, sealed envelope. Identify the envelope with: the words "Bid Documents", project name and number, name of Bidder, and Arkansas Contractors License number, if required; only one bid shall be submitted per State Contractors license number. Submit bids in accordance with the Invitation to Bid. All blanks on the form shall be filled out in ink or be typewritten. Erroneous entries, alterations, and erasures shall be lined out, initialed by the Bidder, and the corrected entry inserted on the Bid Form.

11. **MODIFICATION, WITHDRAWAL AND SCRIVENERS' ERROR.**

11.1 Modification and Withdrawal. Bidder may withdraw bid at any time before bid opening and may resubmit up to the date and time designated for receipt of bids. No bid may be withdrawn or modified after time has been called for the bid opening. Oral modifications to bids will not be considered. Bidder may submit written modifications to bid in writing, by telegraph, or by facsimile and must be received by DBA at any time prior to the expiration of the bidding time and date. All modifications shall be signed and no modification shall show the base bid amount. Telegraph or facsimile modifications shall require written confirmation over the Bidder's original signature within 24 hours after bid opening.

- 11.2 Scriveners' Error. Pursuant to Ark. Code Ann. § 19-4-1405 (e), bidders may request in writing to the DBA Director, to be relieved of their bid any time after the bid opening, but no later than 72 hours after receiving the intent to award, excluding Saturdays, Sundays and holidays. Scriveners' error is an error in the calculation of a bid which can be documented by clear and convincing written evidence and which can be clearly shown by objective evidence drawn from inspection of the original work papers, documents, or materials used in the preparation of the bid sought to be withdrawn; and the bid was submitted in good faith and the mistake was due to a calculation or clerical error, an inadvertent omission, or a typographical error as opposed to an error in judgment.
- 11.2.1 Failure to make a timely request constitutes a waiver by the bidder of the bidder's right to claim that the mistake in his or her bid was a scriveners' error.
12. **DISQUALIFICATION OF BIDDERS.** The State shall have the right to disqualify bids (before or after opening), which includes but is not limited to, evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder, to reject a bid not accompanied by the required bid security or by other data required by the Contract Documents, or to reject a Bid which is in any way incomplete or irregular.
13. **APPLICABLE LAWS.**
- 13.1 Labor. Contractors employed upon the work will be required to conform to the labor laws of the State of Arkansas and the various acts amendatory and supplementary thereto, and to all the laws, regulations, and legal requirements applicable thereto.
- 13.2 Discrimination. Bidder shall not discriminate against any employee, applicant for employment, or subcontractor as provided by law. Bidder shall be responsible for ensuring that all subcontractors comply with federal and state laws and regulations related to discrimination. Upon a final determination by a court or administrative body having proper jurisdiction that the Bidder has violated state or federal laws or regulations, the Owner or DBA, or both may impose a range for appropriate remedies up to and including termination of the Contract.
- 13.3 Taxes. Bidder shall include in the bid all state sales tax, social security taxes, state unemployment insurance, and all other items of like nature. It is the intent that the bid shall represent the total cost to the Owner of all work included in the contract. There are no provisions for a contractor to avoid taxes by using the tax exempt number of a state agency, board, commission or institutions. Said taxes shall be included in the bid price.
- 13.4 State licensing laws for Contractors shall be complied with.
- 13.5 Disclosure. Potential Bidders are hereby notified that any bidder who desires to enter into a contract not exempted from the disclosure requirements, that disclosure is a condition of the Contract and that the Owner cannot enter into any such contract, nor can DBA approve any such contract, for which disclosures are not made and the verbiage of paragraphs a, b, and c below will be included in the body of any contract awarded.

Potential Bidders are hereby notified that:

a. Disclosure is required to be a condition of any present or future subcontract for which the total consideration is greater than twenty-five thousand dollars (\$25,000.00).

b. The Contractor shall require any present or future Subcontractor, for which the subcontract amount is greater than \$25,000.00 to complete and sign the Contract and Grant Disclosure and Certification form. The Contractor shall ensure that any agreement, current or future between the Contractor and a Subcontractor for which the total consideration is greater than \$25,000.00 shall contain the following:

*Failure to make any disclosure required by Governor Executive Order 98-04, or any violation of any rule, regulation or adopted pursuant to that Order shall be material breach of the term of this subcontract. The party who fails to make the required disclosure or who violates the rule, regulation, or policy shall be subject to all legal remedies available to the contractor.*

c. The Contractor shall transmit a copy of the Subcontractor's disclosure form to the agency and a statement containing the dollar amount of the subcontract within ten (10) days upon receipt of subcontractor's disclosure.

Note: A copy of the "Contract and Grant Disclosure and Certification Form" DBA 00 73 73 is included within the division zero documents.

13.5 Minority Participation: Pursuant to Ark. Code Ann. § 22-9-203, the State encourages all small, minority, and women business enterprises to submit bids for capital improvements. Encouragement is also made to all prime contractors that in the event they subcontract portions of their work, consideration is given to the identified groups.

13.6 The bidding, award and administration of the contract shall be made pursuant to Ark. Code Ann. §19-4-1401 et seq., Ark. Code Ann. § 22-9-101 et seq., Ark. Code Ann. § 22-2-101 et seq. and the Minimum Standards and Criteria. The interpretation and intent of these laws and rules take precedence in the event of any conflict with the bid or contract documents, or both. Clarification should be made in accordance with Instruction 3.2.

13.7 Pursuant to Ark. Code Ann. §19-11-105, no state agency may enter into or renew a public contract for services with a Contractor who knows that the Contractor or a Subcontractor employs or contracts with an illegal immigrant to perform work under the contract.

Before executing a public contract, each prospective contractor shall certify in a manner that does not violate federal law in existence on January 1, 2007, that the Contractor at the time of the certification does not employ or contract with an illegal immigrant. Online certification shall be made at: <https://www.ark.org/dfa/immigrant/index.php/user/welcome>

If a Contractor violates this section, the Owner shall require the Contractor to remedy the violation within sixty (60) days. Failure to remedy the violation within the sixty (60) days as required by law, the Owner shall terminate the contract for breach of the contract and the Contractor shall be liable to the Owner for actual damages.

If a Contractor uses a Subcontractor at the time of certification, the Subcontractor shall certify in a manner that does not violate federal law in existence on January 1, 2007, that the Subcontractor at that time of certification does not employ or contract with an illegal immigrant. Subcontractors shall submit the certification required to the Contractor within thirty (30) days after the execution of the subcontract. The Contractor shall maintain on file the certification of the Subcontractor throughout the duration of the term of the contract. If the Contractor learns that a Subcontractor is in violation of this section, the Contractor may terminate the contract with the Subcontractor, and the termination of the contract for a violation of this section shall not be considered a breach of the contract by the Contractor and Subcontractor. Contractor agrees the Owner's Representative or DBA shall have the right to request the Contractor's records of Subcontractors illegal immigrant disclosure statements during the course of the project.

- 13.8 Pursuant to Ark. Code Ann. §25-1-501 (Act 710 of 2017), state agencies shall not enter into contracts with companies for construction work unless the contract includes a written certification from the company or person that the company or person is not currently engaged in a boycott of Israel and agrees for the duration of the contract not to engage in a boycott of Israel.

Before executing a public contract, each prospective contractor shall certify by signing the "Anti-Boycott of Israel" certification. This certification shall be submitted as one of the contract documents. The Contract shall not be approved until the certification is completed and provided with the other bid documents necessary for contract approval. If a Contractor violates this section, the Owner shall require the Contractor to remedy the violation within thirty (30) days. Failure to remedy the violation, shall constitute a breach of the contract and the Contractor shall be liable to the Owner for actual damages.

Note: A copy of the "Anti-Boycott of Israel Certification" is included in section 00 45 00.

- 13.9 Pursuant to Ark. Code Ann. §22-9-105 (Act 422 of 2019) , contractors who have been determined by a State Agency to be on the "Prohibited Bidders List" may not bid on state projects. Bidders should review Section 3-324 of the Building Authority Minimum Standards and Criteria for more information. Contractors who are determined to be prohibited from bidding due to material issues on state contracts may not be awarded state capital improvement contracts until the state agency has determined the material issue is no longer of concern or the contract has been terminated or closed out, whichever is sooner. However, the contractor's ineligible bidding status shall not exceed more than three (3) years.

14. **LIQUIDATED DAMAGES.** The amount of liquidated damages to be assessed shall be in accordance with the amount indicated in the Contract. Bidder understands and agrees that under the terms of the Contract to be awarded, if the Contractor fails to complete the work within the time limit specified in the Contract, the Contractor shall pay the Owner as Liquidated Damages, and not in the nature of a penalty the sum specified in the Bid Form for each day completion is delayed. It is further understood and agreed by bidder that the said sum fixed as Liquidated Damages is a reasonable sum considering the damages that Owner will sustain in the event of any delay in completion of the Work, and said sum is herein agreed upon and fixed as Liquidated Damages because of difficulty in ascertaining the exact amount of damages that may be sustained by such delay.
15. **PREBID CONFERENCE.** See Section 00 11 16 – Invitation to Bid
16. **OPENING.** Bids will be opened as identified in the Invitation to Bid.
17. **EVALUATION AND CONSIDERATION OF BIDS.**
  - 17.1 It is the intent of the State to award a Contract to the lowest responsive qualified Bidder provided the bid has been submitted in accordance with the requirements of the Contract Documents and does not exceed the funds certified for the project by more than 25%. The State shall have the right to waive any formalities in a bid received and to accept the bid which, in the State's judgment, is in its best interests and upon approval of DBA. The State shall have the right to accept any or all bids for a period not to exceed the time frame as stated in 6(d) of Section 00 41 13 Bid Form.
  - 17.2 Tie Bids. If two or more sealed bids are equal in amount, meet Bidding Document requirements, and are the lowest received by the time of the bid opening, then the apparent low bidder will be determined by lot (placing the name of the tie bidders into a container and drawing one name). The drawing will be conducted by DBA personnel and another person so designated by DBA in the presence of a witness and the tie bidders or representatives. The witness shall be an employee of the State of Arkansas. Documentation of the drawing shall be included on the bid tabulation and be signed by those present. Nothing in the above and foregoing will diminish the State's reserved right to reject any and all bids and to waive any formalities.
18. **EXECUTION OF CONTRACT.**
  - 18.1 The apparent low Bidder shall be prepared, if so required by the Owner, to present evidence of experience, qualifications, and financial ability to carry out the terms of the Contract.

- 18.2 The successful Bidder will be required to execute an Agreement with the Owner on a form identical to the Agreement Form included with the Contract Documents and the Performance and Payment Bond and Certification of Insurance and a copy of the policies showing all endorsement, exclusions within the time frame as stated in 6(b) of Section 00 41 13 Bid Form after receipt of the Intent to Award. Failure of the Bidder to do so may result in the Bidder being rejected and could result in disqualification and forfeiture of bid bond. The Owners notice to proceed shall not be issued until the insurance certificates and coverage have been reviewed and approved by the Owner. The successful Contractor will commence work within five (5) days of the start date listed on the notice proceed issued by the owner or DBA.
- 18.3 The successful Bidder will be required to furnish Owner with proof of insurance, as prescribed by the General Conditions and Supplementary General Conditions.

END OF DOCUMENT



**BID FORM**  
**Section 00 41 13 / Rev: April 2021**

Bid Date: Tuesday, August 17, 2021  
Bid Time: 2:30 p.m.  
Bid Opening Location: Division of Building Authority  
501 Woodlane, Suite 101N  
Little Rock, Arkansas 72201

Bid To: ADPHT - AHPP

Bid From: \_\_\_\_\_  
\_\_\_\_\_

DBA Project Number: 8652102R

Project Name: Repairs and Improvements to the Jacob Wolf House Historic Site

- 1) Having carefully examined the Contract Documents for this project, as well as the premises and all conditions affecting the proposed construction, the undersigned proposes to provide all labor, materials, services, and equipment necessary for, or incidental to, the construction of the project in accordance with the Contract Documents within the time set forth, for the lump sum base bid of:

\$ \_\_\_\_\_  
Dollar Amount Is To Be Shown Numerically

- 2) Allowances: Allowances described in Section 01 21 00 are included in the Base Bid Price  
Required

- 3) Unit Prices:  
Not Required

- 4) Trench or  
Excavation  
Safety: Not  
Required

\$ \_\_\_\_\_ Not Required  
Dollar Amount Is To Be Shown Numerically

***Please Note: Do not strike through or add language to the bid form. See Instruction to Bidders #6.1***

- 5) Completion Date: The Bidder agrees that the work will be complete in accordance with the contract documents and ready for Substantial Completion:

Number of Calendar Days: 240

On or Before Date: N/A

- 6) The undersigned, in compliance with the Contract Documents for the construction of the above named project, does hereby declare:

- a. That the undersigned understands that the State reserves the right to reject any and all bids and to waive any formality.

- b. That if awarded the Contract, the undersigned will enter into an Agreement, on a form identical to the form included in the Contract Documents and execute required performance and payment bonds and proof of insurance within ten (10) days after receipt of the Intent to Award, will commence work within five (5) days after the start date of the Notice to Proceed, and will complete the Contract fully by Completion Date indicated. Should the undersigned fail to fully complete the work within the above stated time, he shall pay the Owner as fixed, agreed and liquidated damages and not as a penalty, the sum of:

Dollar amount of liquidated damages per day: \$100 until work is completed or accepted.

- c. The undersigned further agrees that the bid security payable to Owner and accompanying this proposal shall become the property of the Owner as liquidated damages if the undersigned fails to execute the Contract or to deliver the required bonds and proof of insurance to the Owner within the time frame as stated in paragraph 6 (b) from receipt of the Intent to Award as these acts constitute a breach of the Contractor's duties.

- d. That this bid may not be withdrawn for a period of: 60 calendar days after the bid opening.

- e. The undersigned understands that the Owner's intent is to construct all facilities proposed within the limits established by the funds appropriated for the project.

- f. The names of subcontractors and the nature of the work to be performed by each one have been included on the Bid Form.

- g. The following prevailing wage rates will apply:

Bidders are hereby notified that prevailing wage rates will not apply.

***Please Note: Do not strike through or add language to the bid form. See Instruction to Bidders #6.1***

- h. Bids submitted by a "Joint Venture/Joint Adventure" shall be signed by representatives of each component part of the Joint Venture/Joint Adventure. The licenses of each component part of the Joint Adventure should also be listed in the bid submittal. Therefore, Joint Adventure bidders shall indicate at least two (2) signatures and should indicate two (2) licenses numbers on the Bid Form. Exception: Joint Ventures who have been properly licensed with the Arkansas Contractors Licensing Board as a "Joint Venture" need only to indicate the Joint Venture license number on the Bid Form. Joint Venture Bidders shall indicate at least two (2) signatures on the bid form even if they are licensed as a Joint Venture.

7) The following document(s) is attached to and made a condition of this bid.

a. Bid Security

8) The undersigned acknowledges receipt of and inclusion as a part of the Contract Documents the following addenda(s):

#:	_____	Dated:	_____
#:	_____	Dated:	_____
#:	_____	Dated:	_____
#:	_____	Dated:	_____
#:	_____	Dated:	_____
#:	_____	Dated:	_____
#:	_____	Dated:	_____

***Please Note: Do not strike through or add language to the bid form. See Instruction to Bidders #6.1***

- 9) Listing of Mechanical, Plumbing, Electrical, and Roofing Subcontractors or the Prime Contractor if the portion of work will be performed with your own forces.

**Important Please Note**

Indicate the name(s) of each entity performing the listed work below and answer the follow-up question. All Mechanical, Plumbing, Electrical, and Roofing Subcontractors or your own forces if applicable shall be listed regardless of qualifications, licensures or work amount. Bidders should consult the project manual on how to fill out this form. Failure to name the subcontractor or prime contractor in the space provided shall cause the bid to be declared non-responsive and the bid will not receive consideration.

**Mechanical:**

**Not Required**

---

---

**Plumbing:**

**Not Required**

---

---

**Electrical:**

**Not Required**

---

---

**Roofing:**

**Required**

---

- Is the amount of Roofing Work \$50,000 or more? Yes \_\_\_\_\_ No \_\_\_\_\_ -

Is the above listed subcontractor or prime contractor performing any other Work on the project? Yes \_\_\_\_\_ No \_\_\_\_\_ --- If yes, list the Work and the cost of all Work:

---

**Important Notice:** If the Bid Form notes any or all of the above Subcontractor's (Mechanical (HVACR), Electrical, Plumbing, and/or Roofing) as "**Required**", you must list a subcontractor or list your own forces as applicable or your bid will be declared non-responsive.

**Bid Form Signature Page**

**Project Name: Repairs and Improvements to the Jacob Wolf House Hist Project #: 8652102R**

Please Complete the Appropriate Section (Complete Only One)

☐ **Individual Entity of Company**

\_\_\_\_\_  
Legal Name of the Entity or Company Contractors License Number

By: \_\_\_\_\_  
Signature of Authorized Officer of the Company Date

\_\_\_\_\_  
Print Name Title Phone Number

\_\_\_\_\_  
Street Address City State Zip Code

☐ **Corporation (Must Include with bid a copy of the authorized officer's authority to sign)**

By: \_\_\_\_\_  
Signed With Legal Name of the Corporation State of Incorporation Contractor License Number

By: \_\_\_\_\_  
Signature of Authorized Officer of the Corporation Date

\_\_\_\_\_  
Print Name Title Phone Number

\_\_\_\_\_  
Street Address City State Zip Code

☐ **Joint Venture or Adventure**

\_\_\_\_\_  
1st Entity or Company (*legal Name*) Contractors License Number

By: \_\_\_\_\_  
Signature of Authorized Officer of the Company Date

\_\_\_\_\_  
Print Name Title Phone Number

\_\_\_\_\_  
Street Address City State Zip Code

\_\_\_\_\_  
2nd Entity or Company (*legal Name*) Contractors License Number

By: \_\_\_\_\_  
Signature of Authorized Officer of the Company Date

\_\_\_\_\_  
Print Name Title Phone Number

\_\_\_\_\_  
Street Address City State Zip Code



**Bid Bond**  
**Section 00 43 13 / Rev: April 2021**

KNOW ALL PERSONS BY THESE PRESENTS:

That we, \_\_\_\_\_, as Principal,  
and, \_\_\_\_\_, as Surety, a  
corporation duly organized under the laws of \_\_\_\_\_, and who is  
qualified and authorized to do business in the State of Arkansas and is listed on the current  
United States Department of the Treasury's listing of approved sureties, and held and firmly bound  
unto \_\_\_\_\_ ADPHT - AHPP \_\_\_\_\_, the State  
of Arkansas and entities thereof as Obligee (owner/agency), in the sum of five (5) percent of the  
amount of the bid and for payment of which in lawful money of the United States, well and truly to be  
made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and  
severally, firmly by these presents.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT, WHEREAS, Principal has  
submitted a Bid for the work on Division of Building Authority Project number/name: 8652102R  
Repairs and Improvements to the Jacob Wolf House Historic Site

NOW, THEREFORE, if Principal is not released from his bid as defined in the Bidding  
Documents and, if selected as the apparent lowest responsible Bidder, Principal shall, within the time  
period specified in the Bidding Documents, do the following:

- (1) Enter into a written agreement in accordance with the Bid Document.
- (2) File a performance and payment bond, which guarantees faithful performance and  
payment for labor and materials as required by the Bid Documents, in the County where  
the work is to be performed and provide said bond to the obligee.
- (3) Furnish certificates of insurance and all other items as required by the Bidding  
Documents.

In the event of the disqualification of said Bid due to failure of Principal to enter into such agreement and furnish such bonds, certificates of insurance, and all other items as required by the bidding documents, Principal and Surety shall pay obligee the damage, loss, cost, and expenses subject to the amount of the bid security directly arising out of the Principal's default in failing to execute and deliver the contract and the performance/payment bond. Liability shall be limited to five (5) percent of the amount of the bid.

This bid bond is given in accordance with Arkansas laws and regulations, including Arkansas Code Ann. §19-4-1405, §22-9-203 and §22-9-402. This bid bond is binding upon the above named parties, and their successors, heirs, assigns and personal representatives. Executed by the parties who individually represent that each voluntarily enters into and has the authority to enter into this agreement.

IN WITNESS WHEREOF, we have hereunto set our hands this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Principal Company Name: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Signature\*: \_\_\_\_\_

Title: \_\_\_\_\_

Surety Name: \_\_\_\_\_

Surety NAIC Number: \_\_\_\_\_

Resident/Non-Resident Agent Name: \_\_\_\_\_

Signature: \_\_\_\_\_

License Number\*: \_\_\_\_\_

**\* Bids shall be rejected if a proper bid bond/power of attorney is not submitted. Bid Bonds must be executed by a resident/non-resident agent licensed by the Arkansas Insurance Commissioner to represent the surety which have qualified and are authorized to do business in Arkansas and is listed on the current United States Department of the Treasury's listing of approved sureties. The Power of Attorney of the agent to act on behalf of the surety shall be submitted with this Bid Bond.**

## Section 00 43 22 / Bid Form Attachment A Unit Prices

[illegible]



## ISRAEL BOYCOTT RESTRICTION CERTIFICATION

Section 00 45 00 / Rev: April 2021

DBA Project Number: 8652102R

Project Name: Repairs and Improvements to the Jacob Wolf House Historic Site

Pursuant to Arkansas Code Annotated § 25-1-503, a public entity **shall not** enter into a contract valued at \$1,000 or greater with a company unless the contract includes a written certification that the person or company is not currently engaged in and agrees for the duration of the contract not to engage in, a boycott of Israel.

By signing below, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in § 25-1-503\*. If at any time after signing this certification the contractor decides to engage in a boycott of Israel, the contractor must notify the contracting public entity in writing.

If a company does boycott Israel, see Arkansas Code Annotated § 25-1-503.

ADPHT - AHPP

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Name of Public Entity

---

Print Name of Company

---

AASIS Vendor Number

---

Contractor Signature and Date

---

Print Name and Title

"Public entity" means the State of Arkansas, or a political subdivision of the state, including all boards, commissions, agencies, institutions, authorities, and bodies politic and corporate of the state, created by or in accordance with state law or rules, and does include colleges, universities, a statewide public employee retirement system, and institutions in Arkansas as well as units of local and municipal government.



**AGREEMENT FORM**  
**Section 00 52 13 / Rev: April 2021**

THIS AGREEMENT entered into this \_\_\_\_\_ by and between \_\_\_\_\_ hereinafter referred to as the Contractor, and \_\_\_\_\_ ADPHT - AHPP hereinafter referred to as the Owner, and the Department of Transformation and Shared Services, Division of Building Authority (DBA),

WITNESSETH:

- 1) That for and in consideration of the payment by the Owner in the amount of \$ \_\_\_\_\_ - to be made as set forth in the Contract Documents, the Contractor hereby agrees to furnish all tools, labor, equipment, and materials, and to build and construct that certain project in Baxter County, designated as

Project # : 8652102R

Project Name: Repairs and Improvements to the Jacob Wolf House Historic Site

consisting of construction, more specifically described in the Contract Documents attached hereto and incorporated herein by reference. Contract Documents include the following: the Agreement Form (this instrument); the Invitation to Bid; Instruction to Bidders; Bid Form; all Addenda; Performance and Payment Bond; General and Supplementary Conditions; Drawings and Specifications, Drawings listed in the Specifications; Notice to Proceed; Negotiated Changes Documents; and Change Orders. All capital improvements shall be in exact accord with the Contract Documents filed with the Construction Section Office, Division of Building Authority, located in Little Rock, Arkansas, on:

Tuesday, August 17, 2021

The Division of Building Authority (DBA) Construction Section shall have direct contract supervision. Said capital improvements shall be to the satisfaction of the DBA Construction Section, and in accordance with the laws of the State of Arkansas, and the work shall be subject to inspection and approval at all times by the appropriate state and federal agencies.

- 2) Owner may at any time during the progress of the work alter, change, subtract from, or add to said Contract Documents without violating this Agreement or the terms thereof. Said changes, alterations, subtractions, or additions shall be set forth in writing in a document referred to as a "Change Order". Said document shall not be effective unless approved by the DBA. Once effective, the Change Order shall be attached hereto and incorporated herein by reference and shall be made a condition or term of the Contract Documents. Nothing contained in the Change Order shall be construed to waive the sovereign immunity of the State or entities thereof.

- 3) The Contractor agrees, for the consideration set forth in the Bid Form, to begin work within the time frame stated in 6 (b) of Section 00 41 13 Bid Form after a Notice to Proceed is issued and to complete the work:

In: 240 Calendar Days

On or Before: N/A

If the Contractor fails to complete the work within the time limit herein specified, he shall pay to the Owner, as liquidated damages and not in the nature of a penalty, the sum specified in the Bid Form of for each calendar day delayed, it being understood and agreed between the parties hereto that the said sum fixed as liquidated damages is a reasonable sum, considering the Owner will sustain in the event of any such delay, and said amount is herein agreed upon and fixed as liquidated damages because of difficulty of ascertaining the exact amount of damages that may be sustained by such delay. The said sum shall be deducted from the amount of the contract.

- 4) Should Contractor be delayed in the execution or completion of the Work by the act, neglect or default of the State, or by any damage by fire, weather conditions or other casualty or event for which the Contractor is not responsible, or by general strikes or lockouts caused by acts of employees, then any extended period shall be determined and fixed by the Owner with approval given by DBA Construction Section. Said extended period shall be the time for a period equivalent to the time lost by reason of any or all of the causes aforesaid, but no such allowance shall be made unless a claim therefore is presented in writing to the Owner or DBA Construction Section within seven calendar days of the occurrence of the event causing the delay.
- 5) It is mutually agreed between the parties that in the performance of this contract, Contractor is acting independently and in no sense as Agent of the State. Contractor shall not let, assign, or transfer this contract or any interest therein, without the written consent of the Owner and DBA.
- 6) It is agreed and understood between the parties hereto that the Contractor shall accept and the Owner will pay for the Work, at the prices stipulated in the Contract Documents, such payment to be in the form of legal tender, and the payment shall be made at the time and in the manner set forth in the Contract Documents.
- 7) Any laborer or mechanic employed by the Contractor or any Subcontractors for this project, directly on site for the Work covered by the Contract Documents, shall be paid a rate of wages required by the Contract Documents, if required. If the Owner or DBA, or both discovers that wages less than the rate of wages specified by the Contract Documents have been or are being paid, then the Owner or DBA, after giving written notice to the Contractor, will terminate the Contractor's right to proceed with the project Work or such part of the Work as to which there has been a failure to pay the required wages and to prosecute the Work to completion by contract or otherwise, and the Contractor and his sureties shall be liable to the Owner for any excess costs occasioned thereby.

- 8) Contractor shall promptly repair, at his own expense and to the satisfaction of the Owner and DBA Construction Section, damage done by him or his employees or agents at the work site, or to the public property or buildings, or both, and will save the State harmless from all claims of any person for injury to person or to property occasioned by his act, or the acts of his employees or agents, while in the execution of the work specified.
- 9) The Owner or DBA, or both may terminate this agreement to the extent Owner's funds are no longer available for expenditures under this agreement.
- 10) Failure to make any disclosure required by Governor's Executive order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the Agency.
  - a) The Contractor shall prior to entering any agreement with any subcontractor, for which the total consideration is greater than \$25,000.00, require the subcontractor to complete a Contract and Grant Disclosure and Certification Form. The Contractor shall ensure that any agreement, current or future between the contractor and a subcontractor for which the total consideration is greater than \$25,000.00 shall contain the following:

Failure to make any disclosure required by Governor Executive Order 98-04, or any violation of any rule, regulation or adopted pursuant to that Order, shall be a material breach of the term of this subcontract. The party who fails to make the required disclosure or who violates the rule, regulation, or policy shall be subject to all legal remedies available to the Contractor.
  - b) The Contractor shall, within ten days of entering into any agreement with a subcontractor, transmit to Division of Building Authority; a copy of the Contract and Grant Disclosure and Certification Form (00 73 73) completed and signed by the subcontractor and a statement containing the dollar amount of the subcontractor.
  - c) The terms and conditions regarding the failure to disclose and conditions which constitutes material breach of contract and rights of termination and remedies under the Executive Order 98-04 are hereby incorporated within.
- 11) Nothing in this Contract shall be construed to waive the sovereign immunity of the STATE OF ARKANSAS or any entities there of.

Executed by the parties who individually represent that each have the authority to enter into this Contract.

Project # : 8652102R

Project Name: Repairs and Improvements to the Jacob Wolf House Historic Site

**Contractor:** \_\_\_\_\_  
Legal Name of the Entity or Company

\_\_\_\_\_  
Signature of Authorized Officer of the Company

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

ADPHT - AHPP

**Owner:** \_\_\_\_\_  
Agency Name

\_\_\_\_\_  
Signature of Authorized Officer of the Agency

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Email Address

13775 Highway 5 South

Norfolk, Arkansas 72658

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

**Approved: Department of Transformation & Shared Services, Division of Building Authority**

By: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Title

**PERFORMANCE AND PAYMENT BOND**  
**Section 00 61 13 / Rev: April 2021**

1) We \_\_\_\_\_, (Principal), and  
\_\_\_\_\_, (Surety), are held and firmly bound, jointly  
and severally, unto \_\_\_\_\_ ADPHT - AHPP \_\_\_\_\_, as Obligee (Owner),  
in the initial Contract amount of \$ \_\_\_\_\_ - \_\_\_\_\_ said amount to be deemed a Performance  
Bond payable to Owner and in the separate amount of \$ \_\_\_\_\_ - \_\_\_\_\_ said amount to be  
deemed a Payment Bond payable to proper claimants such amounts subject to the terms of this  
Performance Bond and Payment Bond Agreement. The Principal and Surety state that the Surety  
is a solvent corporate surety company authorized to do business in the State of Arkansas and is  
listed on the current United States Department of Treasury's listing of approved sureties.

Principal has by written agreement dated \_\_\_\_\_ entered into a capital  
improvement contract (Contract) with the Owner for:

Repairs and Improvements to the Jacob Wolf House Historic Site

Project # 8652102R .The above referenced Contract is incorporated herein by reference.

2) Under this Performance Bond and Payment Bond Agreement, the Principal and Surety shall be  
responsible for the following:

a. Performance Bond

- i. The Principal shall faithfully perform the above referenced Contract, which is incorporated  
herein by reference.
- ii. In the event that the Principal defaults in its performance of its obligations under the  
Contract, the Principal and the Surety, jointly and severally, shall indemnify and save  
harmless the Owner from all cost and damage which the Owner may suffer by reason of  
Principal's failure to perform the Contract. Said indemnification shall include, but not be  
limited to, full reimbursement and repayment to the Owner for all outlays and expenses  
which the Owner may incur in making good any such default of the Contract by the  
Principal.

b. Payment Bond

- i. Principal shall pay all persons all indebtedness for labor or material furnished or  
performed under the Contract and in doing so this obligation shall be null and void.

- ii. In the event that Principal fails to pay for such indebtedness, such persons shall have a direct right of action against the Principal and Surety, jointly and severally, under this obligation, subject to the Owner's priority.

3) This Performance Bond and Payment Bond is given in accordance with Arkansas laws and rules, including Ark. Code Ann. § 18-44-501 et seq., §19-4-1401 et seq., and § 22-9-401 et seq. The Surety guarantees that the Principal shall comply with Ark. Code Ann. § 22-9-301 et seq. by payment and full compliance with all prevailing hourly wage contract provisions where the contract amount exceeds the amount provided by law.

Any changes made in the terms of the Contract, including but not limited to, the amount of the Contract, or in the work to be performed pursuant to the Contract or the giving by the Owner of any extension of time for the performance of the Contract, or any other forbearance on the part of either the Owner or the Principal to the other shall not in any way release the Principal and the Surety or Sureties or either or any of them, their heirs, personal representatives, successors or assigns from their liability hereunder, notice to and consent of the Surety or Sureties of any such change, extension or forbearance being are hereby voluntarily waived. In no event shall the aggregate liability of the Surety exceed the greater amount of the Contract, including DBA approved change orders.

This Performance Bond and Payment Bond Agreement is binding upon the above named parties, and their successors, heirs, assigns and personal representatives.

Executed by the parties who individually represent that each voluntarily enters into and has the authority to enter into this agreement.

By: \_\_\_\_\_  
Contractor's (Principal) Signature Date

By: \_\_\_\_\_  
Arkansas Resident Agent or Non-Resident Agent Signature (attach Power of Attorney) Date

\_\_\_\_\_  
Agent's License Number

\_\_\_\_\_  
Surety Company's NAIC Number

\_\_\_\_\_  
Print Agent's Name Date

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City County State Zip Code

\_\_\_\_\_  
Business Phone Number Email Address

## CERTIFICATE OF SUBSTANTIAL COMPLETION

Section 00 65 16 / Rev: April 2021

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Project Name: Repairs and Improvements to the Jacob Wolf House Historic Site

DBA Project Number: 8652102R Owner/Agency: ADPHT - AHPP

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### DEFINITION OF DATE OF SUBSTANTIAL COMPLETION:

The Date of Substantial Completion of the Work, or designated portion thereof, is the date certified by the Design Professional and approved by the Owner and DBA when the Work is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents. Check the appropriate box below to denote a full or partial substantial completion.

☐ **PARTIAL SUBSTANTIAL COMPLETION**

The partial substantial completion includes the following area(s):

The Work performed under this Contract has been reviewed and found to be substantially complete. The Date of Substantial Completion for the above portion(s) of the Project is hereby established as: \_\_\_\_\_, which is the date of commencement of applicable warranties required by the Contract Documents, and assumption by the Owner of responsibility for maintenance, security, heat, utilities, damage to the Work and insurance excepting as stated below.

☐ **FULL SUBSTANTIAL COMPLETION**

The Work performed under this Contract has been reviewed and found to be substantially complete. The Date of Substantial Completion for the Project is hereby established as:

\_\_\_\_\_, which is the date of commencement of applicable warranties required by the Contract Documents, and assumption by the Owner of responsibility for maintenance, security, heat, utilities, damage to the Work and insurance excepting as stated below.

**The responsibilities of the Owner and the Contractor shall be as follows:** ( Note - Owner's and Contractor's legal and insurance counsel should determine and review insurance requirements and coverage; Contractor shall secure consent of the Surety Company, if any.)

A list of punch list items to be completed or corrected, prepared by the Contractor and verified and amended by the Architect/Engineer is attached hereto. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. The date of commencement of warranties for items on the attached list will be the date of final completion and inspection/acceptance by the Architect/Engineer, Owner and DBA.

In the case of a full substantial completion the Owner and Contractor understand and agree that all items listed on the attached punch list must be completed within 30 calendar days from the date of substantial completion. Failure to complete the punch list items within the above referenced timeframe may result in notification to and request for action of the Surety Company's Performance and Payment Bond.

**Certification of Design Professional:**

Firm Name: Clements & Associates/Architecture, Inc.

Address: 507 Main Street  
North Little Rock, Arkansas 72114

\_\_\_\_\_  
Signature Title Date

**Approval of Contractor:**

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature Title Date

**Approval of Owner-Agency:**

Agency Name: ADPHT - AHPP

Address: 13775 Highway 5 South  
Norfolk, Arkansas 72658

\_\_\_\_\_  
Signature Title Date

**Approval of Dept. of Transformation and Shared Services, Division of Building Authority:**

\_\_\_\_\_  
Signature Title Date

Cc: Surety Company

## Certificate of Final Completion – Capital Improvement Project

Section 00 65 19 / Rev: April 2021

DBA Project Number: 8652102R

Project Name: Repairs and Improvements to the

We, the undersigned parties, state:

Jacob Wolf House Historic Site

- 1) The date of final completion for the above referenced project is herein established as: \_\_\_\_\_  
Pursuant to Arkansas Code Annotated §22-9-604, retainage shall be released within thirty (30) days of the final completion date. The establishment of the final completion date shall not be deemed to relieve the Contractor of its obligation contained in the contract documents including but not limited to providing all close out documents for final payment.
- 2) All known details of the project are resolved and there is no uncompleted work left, no Contractor claims or outstanding progress payment(s).
- 3) The project punch list items, excluding warranty work is complete.
- 4) The substantial completion certificate previously executed established the twelve (12) month warranty period for projects and a twenty four (24) month warranty for roofing projects, or both. Sixty (60) days prior to the warranty expiration the parties listed below shall conduct a final warranty inspection; this report will be delivered to the Contractor who will correct all defects identified in the Design Professionals or Owners follow-up inspection reports.

### Contractor:

### Design Professional:

\_\_\_\_\_  
Contractor Company/Corporation Name

\_\_\_\_\_  
Clements & Associates/Architecture, Inc.

\_\_\_\_\_  
Design Professional Firm Name

\_\_\_\_\_  
By: Contractor Authorized Representative

\_\_\_\_\_  
By: Design Professional Authorized Representative

\_\_\_\_\_  
Print Name Date

\_\_\_\_\_  
Print Name Date

### State Agency, Board & Commission:

### Division of Building Authority

\_\_\_\_\_  
ADPHT - AHPP

\_\_\_\_\_  
Owner/Agency Name

\_\_\_\_\_  
By: DBA Observer or Authorized Representative

\_\_\_\_\_  
By: Agency Authorized Representative

\_\_\_\_\_  
Print Name Date

\_\_\_\_\_  
Print Name Date



**Release of Claims**  
**Section 00 65 19.13 / Rev: April 2021**

Comes the undersigned, who does hereby swear and affirm that:

1. My name is: \_\_\_\_\_, and

I am doing business as: \_\_\_\_\_

and my legal address is: \_\_\_\_\_  
\_\_\_\_\_

2. Except as stated in Paragraph Four (4) below, pursuant to Contract # : 8652102R

which was executed on: \_\_\_\_\_, on the following project:  
Repairs and Improvements to the Jacob Wolf House Historic Site

I have paid and have otherwise satisfied all obligations for all furnished materials and equipment, all work, labor and services performed, and for all known claims against the Contractor arising in any manner in connection with the performance of the above referenced contract for which the Owner might in any way be held responsible.

3. Except as stated in Paragraph Four (4) below, to the best of my knowledge, information and belief, the releases or waivers of Claims, attached hereto and incorporated herein, includes the above referenced contract, all subcontractors, all suppliers of materials and equipment, and all performers of work, labor or services who have or may have claims against the Owner arising in any manner out of the performance of the Contract.

4. The Exceptions are: (if none exists, then indicate "none". The Contractor shall furnish a written explanation to the Owner for each exception.)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Affiant's Signature

\_\_\_\_\_  
Date

Verification

STATE OF ARKANSAS                    >

>

COUNTY OF: \_\_\_\_\_

Subscribed and Sworn To before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_.







**Division of Building Authority  
General Conditions  
Section 00 72 13 / Rev: April 2021**

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**End of TOC**

## **ARTICLE 1 -- GENERAL PROVISIONS**

### **1.1 DEFINITIONS**

- 1.1.1 **Contract Documents:** Contract Documents consist of Agreement; Invitation to Bid; Instruction to Bidders; the Bid Form; the Bid and the Performance and Payment Bonds; General and Supplementary Conditions; Specifications; Drawings; Addenda issued prior to execution of the Contract; Front End Documents; all DBA approved Change Orders; Wage Rate Determinations (if required); other documents listed or referred to in the Agreement; and modifications issued after execution of the Contract and signed by Contractor and Owner, and approved by DBA.
- 1.1.2 **Contract:** The Contract Documents form the Contract for construction. The Contract Documents will not be construed to create a contractual relationship between the Design Professional and Contractor, between the Owner and a Subcontractor, between the Owner and Design Professional, or between entities other than the Owner and Contractor; however, a contractual relationship does exist between the Contractor and the agency referred to as Owner, and DBA for approval purposes.
- 1.1.3 **Work:** Construction and services required by the Contract Documents whether completed or partially completed, include tools, labor, equipment, supplies, transportation, handling, and incidentals provided by the Contractor.
- 1.1.4 **Project:** The total capital improvement project described in the Contract Documents.
- 1.1.5 **Drawings:** Graphic and textual portions of the Contract Documents showing the design, location, and dimensions and size of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
- 1.1.6 **Specifications:** Written requirements for materials, equipment, systems, standards, and workmanship for the Work, and performance of related services.
- 1.1.7 **Project Manual:** Volume, which may include the bidding requirements, forms, contracting requirements, and the Specifications.
- 1.1.8 **Owner:** The person or entity identified as such in the Contract Agreement, referred to throughout the Contract Documents as singular in number. The term Owner means the Owner which is a party to this contract.

- 1.1.9 Contractor: The person or entity identified as such in the Contract Agreement, referred to throughout the Contract Documents as singular in number. The Contractor means the person or other entity entering into the contract with the Owner. The term Contractor means the Prime Contractor or the Prime Contractor-authorized representative.
- 1.1.10 Design Professional (Architect/Engineer/Consultant): The person or entity identified as such in the Agreement, lawfully licensed to practice architecture or engineering or another field of expertise and under contract to Owner to provide design service, advice, and consultation, referred to throughout the Contract Documents as if singular in number. The term Design Professional means the Architect/Engineer/Consultant or the authorized representative.
- 1.1.11 Subcontractor: Any person, firm, or corporation with a direct contract with the Contractor who acts for or in behalf of the Contractor in executing a portion of the Work. The term Subcontractor is referred to as singular in number and means the Subcontractor or the Subcontractor-authorized representative.
- 1.1.12 Inspector: A duly authorized representative of the Owner, DBA and Design Professional, designated for detailed inspection and/or observations of materials, construction, workmanship, and methods of construction.
- 1.1.13 Sites: The particular location of that part of the project being considered.
- 1.1.14 State: The Owner or DBA, or both
- 1.1.15 Day(s): Unless specifically referred to as calendar days, "day(s)" refers to a period of time meaning "work" days.

## 1.2 **INTENT**

- 1.2.1 The intent of the Contract Documents is to set forth the standards of construction, the quality of materials and equipment, the guarantees that are to be met, and to include items necessary for proper execution and completion of the Work. The Contract Documents are complementary and what is required by one will be as binding as if required by all. Performance by the Contractor shall be required to the extent consistent with the Contract Documents and reasonably inferable as necessary to produce indicated results.
- 1.2.2 Organization of the Specifications into divisions, sections, and articles, and arrangement of Drawings will not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

- 1.2.3 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### 1.3 CAPITALIZATION

- 1.3.1 Terms capitalized in the Contract Documents include those which are specifically defined, the titles to numbered sections and articles, identified references to paragraphs, and the titles of other published documents.

### 1.4 INTERPRETATION

- 1.4.1 Whenever in these Contract Documents the words "as ordered", "as directed", "as required", "as permitted", "as allowed", or words or phrases of like importance are used, it shall be understood that the order, direction, requirement, permission, or allowance of the Owner and Design Professional is intended.
- 1.4.2 Whenever in these Contract Documents the word "product" is used, it shall be understood that the materials, systems, and equipment will be included.
- 1.4.3 Whenever in these Contract Documents the word "provide" is used, it shall be understood that it means to "furnish and install".
- 1.4.4 The Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an", but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

## ARTICLE 2 -- OWNER

### 2.1 LAND

- 2.1.1 The Owner will provide the lands shown on the Drawings upon which the Work shall be performed. The Owner will provide a right-of-way for access to the project site.
- 2.1.2 The Owner will provide base lines for the location of the principle component parts of the Work with a suitable number of benchmarks adjacent to the Work.

### 2.2 RIGHT OF ENTRY BY OWNER

- 2.2.1 The Owner and his authorized representative will have the right to enter the property or location on which the Work shall be constructed. The Owner further reserves the right to construct or have his authorized agents construct such work as the Owner will desire, so long as these operations do not interfere with or delay the work being constructed under this Contract.

**2.3 OWNER'S RIGHT TO CARRY OUT THE WORK**

- 2.3.1 If the Contractor defaults or neglects to perform the Work in accordance with the Contract Documents, including the requirements with respect to the schedule of completion, and fails after ten days written notice from the Owner to correct the deficiencies, or fails to work diligently to correct the deficiencies. The Owner may deduct the cost thereof from the payment then or thereafter due the Contractor.

**ARTICLE 3 -- CONTRACTOR**

**3.1 GENERAL**

- 3.1.1 The Contractor shall perform the Work in accordance with the Contract Documents.
- 3.1.2 The Contractor shall furnish labor, materials, equipment, and transportation necessary for the proper execution of the work unless specifically noted otherwise. The Contractor shall do all the work shown on Drawings and described in Specifications and all incidental work considered necessary to complete the project in a substantial and acceptable manner, and to fully complete the work or improvement, ready for use, occupancy and operation by the Owner. Drawings and Specifications shall be interpreted by the Design Professional or the Owner if no Design Professional exists for the project.
- 3.1.3 The Contractor shall cooperate with the Owner, Design Professional, Inspectors, and with other contractors on the Project. Contractor shall allow inspectors acting in an official capacity, to have access to the project site.
- 3.1.4 The Contractor shall determine that the final and completed work on the project is in accordance with the Contract Documents. The failure of the Design Professional to find or correct errors or omissions in the use of materials or work methods during the progress of the work shall not relieve the Contractor from his responsibility to correct all the defects in the Work.
- 3.1.5 The Contractor shall assist in making final inspections and shall furnish such labor and equipment as may be required for the final tests of equipment, piping, and structures.

**3.2 REVIEW OF FIELD CONDITIONS**

3.2.1 Before ordering material or doing Work, the Contractor shall verify all measurements involved and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference between actual dimensions and the measurements indicated on Drawings; differences which may be found shall be submitted to Design Professional for consideration before proceeding with the Work.

3.2.2 Drawings may show the location or existence of certain exposed and buried utilities as well as existing surface and subsurface structures. The Owner assumes no responsibility for failure to show any or all such utilities and structures on the Drawings or to show such in the exact location. It is mutually agreed such failure will not be considered sufficient basis for claims for extra work or for increasing the pay quantities in any manner unless the obstruction encountered necessitates substantial changes in the lines or grades or requires the building of a special structure.

### 3.3 **REVIEW OF CONTRACT DOCUMENTS**

3.3.1 The Contractor shall study and compare Drawings, Specifications, and other instructions as a Construction Professional, not as a Design Professional and shall report to the Design Professional at once any error, inconsistency, or omission discovered.

3.3.2 In the event of conflict among the Contract Documents, interpretations will be based on the following order of precedence, stated highest to lowest:

- a. The Agreement
- b. This Division Zero (0) shall control in the event of conflict between this Division Zero (0) and other Divisions.
- c. Addenda to Drawings and Specifications with those of later date having precedence.
- d. Drawings and Specifications

3.3.3 Since the Contract Documents are complementary, the Contractor shall take no advantage of any apparent error or omission in the Drawings and Specifications. The Owner or Design Professional shall furnish interpretations as deemed necessary for the fulfillment of the intent of the Drawings and Specifications.

3.3.4 Discrepancies found between the Drawings and Specifications and actual site conditions or any errors or omissions in the Drawings or Specifications shall be immediately reported to the Design Professional or in the case where a Design Professional is not on the Project, the Owner shall be notified, who shall address such error or omission in writing. Work done by the Contractor after discovery of such discrepancies, errors, or omissions shall be at the Contractor's risk and expense.

- 3.3.5 The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Owner, Design Professional, and DBA access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of differences between the drawings and specifications the more stringent document will prevail.

#### **3.4 REQUEST FOR SUPPLEMENTARY INFORMATION**

- 3.4.1 The Contractor shall make timely requests of the Owner or Design Professional for additional information required for the planning and production of the Work. Such requests shall be submitted as required, but shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Contractor understands and agrees that it is Contractor's duty to determine the need for, and to request said additional information in writing from the Design Professional by such date as allows Design Professional to provide the information to the Contractor by a date that will not adversely affect Contractor's ability to complete the Work by the date specified in the Contract.
- 3.4.2 Additional instructions may be issued by the Design Professional during the progress of the Work to clarify the Drawings and Specifications or as may be necessary to explain or illustrate changes in the Work.

#### **3.5 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

- 3.5.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work. The Owner or their designated representative may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- 3.5.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- 3.5.3 Samples are physical examples that illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged.
- 3.5.4 The Contractor shall provide shop drawings and other submittals, settings, schedules, and other drawings as may be necessary for the prosecution of the Work in the shop and in the field as required by the Drawings, Specifications, or Design Professional instructions. The Contractor shall coordinate all such drawings, submittals etc. and review them for accuracy, completeness, and compliance with other contract requirements.

Any deviation from the contract documents shall be disclosed upon submission to the Owner/Design Professional. Approval shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract. Any work done before receiving approval from the Owner/Design Professional will be at the Contractor's risk.

### **3.6 LABOR AND MATERIALS**

3.6.1 Except as otherwise specifically stated in the Contract, the Contractor shall provide, but not be limited to, all materials, labor, tools, equipment, water, light, heating and cooling, power, transportation, superintendence, temporary construction of every nature, taxes legally collectible because of the Work, and all other services and facilities of every nature whatsoever necessary to complete the Work in accordance with the Contract Documents in an orderly and efficient manner. The sequence of construction operations shall follow the schedule of construction as approved by the Design Professional. The Work shall not be discontinued by the Contractor without approval of the Design Professional. Should prosecution of the Work be discontinued for any reason, the Contractor shall notify the Design Professional at least twenty-four hours in advance of resuming the Work.

3.6.2 All equipment, material, and articles furnished under this contract shall be new and of most suitable materials grade for the purpose intended, unless otherwise specifically provided in this contract. Materials and equipment furnished under this Contract will be subject to inspection by the Owner's authorized representative or by independent laboratories. Defective material, equipment, or workmanship may be rejected at any time before the acceptance of the Work even though the defective material, equipment, or workmanship may have been previously overlooked and estimated for payment. The Contractor shall replace defective equipment and material in accordance with the Contract Documents at no additional cost to the Owner.

3.6.3 The Contractor shall provide materials and supplies not subject to conditional sales agreements, or other agreement reserving unto the seller any right, title, or interest therein. All materials and supplies shall become the property of the Owner upon final acceptance of this Contract by the Owner.

3.6.4 If shop tests are to be conducted, the Contractor shall notify the Owner of such tests so a representative may witness tests, if desired.

3.6.5 The Contractor may make substitutions only with the consent of the Owner, after evaluation by the Design Professional, and in accordance with a Change Order.

### **3.7 UNAUTHORIZED WORK**

- 3.7.1 Work done without lines and grades having been given or work done beyond the lines or not in conformity with the grades shown on the Drawings or as provided by the Owner, except as provided herein, and work completed without proper inspection and supervision or any extra or unclassified work completed without written authority and prior agreement shall be at the Contractor's risk. Such unauthorized work, at the option of the Design Professional, may not be measured and paid for and may be ordered removed at the Contractor's expense.

**3.8 SUPERINTENDENCE**

- 3.8.1 The Contractor shall supervise and direct the Work. The Contractor shall be solely responsible for construction means, methods, techniques, sequences, and procedures and for coordinating portions of the Work under the Contract.
- 3.8.2 The Contractor shall employ a qualified superintendent during the duration of the Project who is acceptable to the Owner, Design Professional and DBA Construction. The superintendent shall be maintained on the Project site and shall be present on the site at all times work is in progress. The superintendent shall be capable of reading and understanding the Drawings and Specifications and shall have full authority to act in behalf of the Contractor. All directions and instructions given to the Superintendent shall be considered as given to the Contractor and shall be as binding as if given to the Contractor.
- 3.8.3 Workmanship shall be performed by workmen experienced in their trade and skilled and experienced for the class of work to which assigned. Any person, including supervisory personnel, who does not show and exhibit skill and proficiency in said work shall be removed by the Contractor and replaced by a competent and experienced workman.
- 3.8.4 The Contractor shall, at all times, be responsible for the conduct and discipline of his employees and all Subcontractors and their employees. Disorderly, incompetent or intemperate persons, or persons who commit any crimes or trespass on public or private property in the vicinity of the Work must not be allowed to continue working upon the project which the Contractor has with the State. Any superintendent, foreman or workman employed by the Contractor or a Subcontractor who unreasonably refuses or neglects to comply with the instructions of the Owner, Design Professional, or Inspector, shall, at the written request of the Owner or Design Professional, be removed from the work site and shall not be allowed to work further on any portion of the work or another State Project without the approval of the Owner.

- 3.8.5 The Contractor shall coordinate Work by the various trades to provide uniform and symmetrical layout and spacing of the exposed components which will affect the finished design and appearance. Where spacing and related locations are not specifically shown on Drawings or where in doubt, the Contractor shall consult the Design Professional prior to installation of that part of the Work.

### **3.9 PERMITS, FEES, AND NOTICES**

- 3.9.1 The Contractor shall purchase and secure all applicable permits and licenses and give all notices necessary and incidental to the prosecution of the Work. However, in accordance with Ark. Code Ann. §22-9-213, public works construction projects conducted by DBA or other state agencies are exempt from permit fees or inspection requirements of county or municipal ordinances.

- 3.9.2 When new construction under the Contract crosses highways, railroads, streets or utilities under the jurisdiction of the state, county, city, or other public agency, public utility, or private entity, the Contractor shall secure written permission from the proper authority before executing such new construction. A copy of this written permission shall be filed with the Owner before any work is completed. The Contractor shall furnish a release from the proper authority before final acceptance of the Work. Any bonds required for this Work shall be secured and paid for by the Contractor.

### **3.10 SAMPLES AND TESTS**

- 3.10.1 The Contractor shall provide samples, materials, and equipment necessary or required for testing as outlined in the various sections of the Specifications or as directed by the Owner. The Contractor shall pay all costs for testing. Should materials, methods, or systems fail to meet specified standards, the Contractor shall pay all costs for additional testing as required by the Owner.

- 3.10.2 All tests shall be made by a laboratory approved by the Owner.

### **3.11 LOCATION, GRADIENT, AND ALIGNMENT**

- 3.11.1 Based upon the site information provided by the Owner and verified by the Contractor, the Contractor shall develop and make detailed surveys necessary for construction including slope stakes, batter boards, and other working points, lines and elevations. The Contractor shall verify the figures before laying out the work and will be held responsible for any error resulting from its failure to do so.

- 3.11.2 The Contractor shall report any errors, inconsistencies, or omissions to the Design Professional as a request for information.

- 3.11.3 The Contractor shall preserve benchmarks, reference points and stakes, and in the case of destruction thereof by the Contractor, shall be responsible for damage or mistakes resulting from unnecessary loss or disturbance.

### 3.12 **LAND**

- 3.12.1 Additional land and access thereto not shown on Drawings that may be required for temporary construction facilities or for storage of materials shall be provided by the Contractor at his expense with no liability to the Owner. The Contractor shall confine his equipment and storage of materials and the operation of his workmen to those areas shown on the Drawings and described in the Specifications, and such additional areas which he may provide or secure as approved by the Owner.

- 3.12.2 The Contractor shall not enter upon private property for any purpose without first obtaining permission.

- 3.12.3 The Contractor shall be responsible for the preservation of and prevent damage or injury to all trees, monuments, and other public property along and adjacent to the street and right-of-way. The Contractor shall prevent damage to pipes, conduits and other underground structures, and shall protect from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location, and shall not remove monuments or property marks until directed.

### 3.13 **LIMITS OF WORK**

- 3.13.1 The Contractor shall conduct Work and operations so as to cause a minimum of inconvenience to the public. At any time when, in the opinion of the Owner or Design Professional, the Contractor is obstructing a larger portion of a road, street, or other public right-of-way than is necessary for the proper execution of the Work, the Design Professional may require the Contractor to finish the sections on which work is in progress before work is commenced on any new sections.

### 3.14 **WARRANTY**

- 3.14.1 In addition to any other warranties in this contract, the Contractor warrants that Work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any Subcontractor or supplier. The Contractor shall warrant that all Work, materials, and equipment furnished will be free from defects in design, materials, and workmanship and will give successful service under the conditions required.

The warranty period for Work, materials, and equipment furnished by the Contractor shall be one year from the date of the written acceptance of the Work as stated in the Substantial Completion Form approved by the Contractor, Owner, Design Professional and DBA or the date that the DBA approves the final payment request, unless a longer period is agreed upon.

- 3.14.2 Warranty of Title: The Contractor warrants good title to all materials, supplies, and equipment incorporated in the Work and agrees to deliver the premises together with all improvements thereon free from any claims, liens or charges, and agrees further that neither it nor any other person, firm or corporation shall have any right to a lien upon the premises or anything appurtenant thereto.

### 3.15 PATENTS AND ROYALTIES

- 3.15.1 If the Contractor is required or desires to use any design, device, material or process covered by letters, patent, or copyright, he shall provide for such use by suitable legal agreement with the patents or Owner. It is mutually understood and agreed that without exception the Contract Sum shall include all royalties or costs arising from patents, trademarks, and copyrights in any way involved in the Work.

The Contractor and the surety shall defend, indemnify, and save harmless the Owner and all its officers, agents and employees from all suits, actions, or claims of any character, name and description brought for or on account of infringement or alleged infringement by reason of the use of any such patented design, device, material or process of any trademark or copyright used in connection with the Work agreed to be performed under this Contract, and shall indemnify the Owner for any cost, expense, or damage which it may be obliged to pay by reason of any action or actions, suit or suits which may be commenced against the Owner for any such infringement or alleged infringement at any time during the prosecution of the Work contracted for herein.

It is mutually agreed that the Owner may give written notice of any such suit to the Contractor, and thereafter, the Contractor shall attend to the defense of the same and save and keep harmless the Owner from all expense, counsel fees, cost liabilities, disbursements, recoveries, judgments, and executions in any manner growing out of, pertaining to, or connected therewith.

### 3.16 CLEANING UP

- 3.16.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials, not purchased for or by the Owner.

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

## **ARTICLE 4 -- ADMINISTRATION OF CONTRACT**

### **4.1 DESIGN PROFESSIONAL AUTHORITY**

- 4.1.1 The Design Professional will interpret the requirements of the Contract Documents and decide matters concerning performance there under on request of the Owner or Contractor.
- 4.1.2 The Design Professional will provide administration of the Contract as described in the Contract Documents and will be the Owner's representative. The Design Professional will decide any and all questions as to the acceptability of materials or equipment furnished, work performed, interpretation of the Drawings and Specifications, rate of progress of the Work, acceptability of the quality of workmanship provided, and other questions as to the fulfillment of the Contract by the Contractor.
- 4.1.3 The Design Professional will prepare all change orders on the form specified by DBA. The Design Professional may authorize minor changes in the Work not involving adjustment in Contract Sum or extension of Contract Time and not inconsistent with the intent of the Contract Documents.
- 4.1.4 The Design Professional and his authorized representatives, Owner and DBA will have the right to enter the property or location on which the Work shall be constructed.

### **4.2 CLAIMS**

- 4.2.1 Definition: A claim is a demand or assertion by one of the parties seeking 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 includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. Claims will be initiated by written notice. The responsibility to substantiate claims shall rest with the party making the claim.
- 4.2.2 Claims of the Contractor or the Owner: Claims regarding the Work of the Contract shall be referred initially to the Design Professional for a decision. The Design Professional will review claims, and 1) reject in whole or in part; 2) approve the claim; 3) suggest a compromise; 4) advise the parties that the Design Professional is unable to resolve the claim.

- 4.2.3 Claims for Concealed or Unknown Conditions: If new and unforeseen items of work are discovered, which cannot be covered by any item or combination of items for which there is a Contract Sum, then the Contractor shall notify the Design Professional as quickly as reasonably possible and shall not continue working on the discovered new or unforeseen items without express written permission from the Design Professional. The Contractor shall complete such work and furnish such materials as may be required for the proper completion or construction of the work contemplated upon written Change Order from the Design Professional as approved by the Owner and DBA. Work shall be performed in accordance with the Contract Documents.
- 4.2.4 Claims for Extensions of Time: The Contractor shall provide written notice to Design Professional within seven calendar days stating the cause of the delay and request an extension of Contract Time. The Design Professional will act on the request in writing. The extension of time shall be for a period equivalent to the time lost by reasons indicated. No extension of time shall be effective until included in a Change Order approved by the Owner, Design Professional and DBA.
- 4.2.5 Claims for Changes in the Work: The Contractor shall provide written notice to Design Professional within seven calendar days after the receipt of instructions from the Owner, as approved by the Design Professional and DBA to proceed with changes in the Work and before such Work is commenced. Changes in the Work shall not be commenced before the claim for payment has been approved, except in emergencies endangering life or property. The Contractor's itemized estimate sheets showing labor and material shall be submitted to the Design Professional. The Owner's order (Change Order) for changes in the Work shall specify any extension of the Contract Time and one of the following methods of payment:
- a. Unit prices or combinations of unit prices, which formed the basis of the original Contract.
  - b. A lump sum fee based on the Contractor's estimate, approved by the Design Professional and accepted by the Owner.
  - c. The applicable methods of computation as set forth in 7.2.2.3.
- 4.2.6 Claims for Additional Costs: In case of an emergency which threatens loss or injury of property or safety of life, the Contractor shall be allowed to act, without previous instructions from the Design Professional, in a diligent manner. The Contractor shall notify the Design Professional immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted, but in no case more than 7 calendar days following the event causing the emergency, to the Design Professional for consideration.

The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided under these General Conditions. No agreement to pay costs for additional work shall be effective until included in a Change Order approved by the Owner, Contractor, the Design Professional and DBA.

## **ARTICLE 5 -- SUBCONTRACTORS**

### **5.1 ASSIGNMENT OF CONTRACT**

- 5.1.1 Neither the Owner nor the Contractor shall have the right to sublet, sell, transfer, assign, or otherwise dispose of the "Contract" or any portion thereof without written consent of the other party. No assignment, transfer, or subletting, even with the proper consent, shall relieve the Contractor of his liabilities under this Contract. Should any Assignee or Subcontractor fail to perform the work undertaken by him in a satisfactory manner, the Owner, with DBA approval, has the right to annul and terminate the Assignee's or Subcontractor's contract on the project.

### **5.2 SUBCONTRACTS**

- 5.2.1 The subcontracting of the whole or any part of the Work to be done under this Contract will not relieve the Contractor of his responsibility and obligations. All transactions of the Owner or Design Professional shall be with the Contractor. Subcontractors will be considered only in the capacity of employees or workmen and shall be subject to the same requirements as to character and competency.
- 5.2.2 The Contractor shall discharge or otherwise remove from the project any Subcontractor that the Owner or the Design Professional has reasonably determined as incompetent or unfit.
- 5.2.3 The Contractor may not change those Subcontractors listed on the proposal without the written approval of the Owner, Design Professional and DBA. The Contractor shall submit written evidence, which includes but is not limited to, that the substituted contractor is costing the same amount of money or less and if costing less, that the saving will be deducted from the total contract of the prime contractor and rebated to the Owner prior to any approval. The Contractor shall submit his request to the Design Professional who then shall review the request, if approved, the request and approval shall be forwarded to the Owner. The Owner shall then review the request and accompanying paperwork and if approved, shall forward the approval and the accompanying documents to DBA. DBA shall review all of the documents.

DBA shall provide written notification to the Contractor, Design Professional and Owner as its determination. The Contractor shall not be relieved of any liabilities under this Contract, but shall be fully responsible for any Subcontractor or work by said Subcontractor where Subcontractor is employed by the Contractor to perform work under this Contract. Nothing contained in the Contract Documents shall create contractual relations between any Subcontractor and the State.

- 5.2.4 No officer, agent, or employee of the Owner, including the Design Professional, shall have any power or authority to bind the Owner or incur any obligation in his behalf to any Subcontractor, material supplier or other person in any manner whatsoever.

## **ARTICLE 6 - CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

### **6.1 OTHER CONTRACTS**

- 6.1.1 The Owner reserves the right to award other contracts in connection with the Project. The Contractor shall cooperate with the other contractors with regard to the storage of materials and equipment, access to the site, and execution of their work. It shall be the Contractor's responsibility to inspect the work of other contractors which will affect the work of this Contract and to report to the Owner irregularities which will not permit him to complete his work in a satisfactory manner or in the time allotted. Failure to so report shall constitute an acceptance of the work of other contractors.

### **6.2 DEPENDENCE ON OTHERS**

- 6.2.1 If any part of the Contractor's work depends for proper execution or results upon the work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the work, promptly report to the Design Professional any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acceptance of the work.

## **ARTICLE 7 -- CHANGES IN THE WORK**

### **7.1 GENERAL**

- 7.1.1 The Owner may, as the need arises, without invalidating the Contract, order changes in the work in the form of additions, deletions, or modifications. Compensation to the Contractor for additional work or to the Owner for deductions in the work and adjustments for the time of completion shall be adjusted at the time of ordering such change.

7.1.2 Additional work shall be done as ordered in writing by the Owner. The order shall state the location, character, and amount of extra work. All such work shall be executed under the conditions of the Contract, subject to the same inspections and tests.

7.1.3 The Design Professional and the Owner reserve and shall have the right to make changes in the Contract Documents and the character or quantity of the work as may be considered necessary or desirable to complete fully and acceptably the proposed construction in a satisfactory manner.

## 7.2 **CHANGE ORDERS**

7.2.1 A Change Order is a written instrument, prepared by the Design Professional/DBA and approved by the Design Professional, the Contractor, the Owner, and DBA, stating their agreement upon the following, separately or in any combination thereof:

- a. Description and details of the work.
- b. Amount of the adjustment in the Contract Sum.
- c. Extent of the adjustment in the Contract Time.
- d. Terms and conditions of the Contract Documents.

7.2.2 Change Order requests by the Contractor shall be submitted in a complete itemized breakdown, acceptable to the Owner, Design Professional and DBA. Nothing contained in the change order shall be construed to waive the sovereign immunity of the State or entities thereof.

7.2.2.1 Where unit prices are stated in the Contract, Contractor should submit an itemized breakdown showing each unit price and quantities of any changes in the Contract Amount. The value of all such additions and deductions shall then be computed as set forth in Paragraph 7.2.2.3.

7.2.2.2 The Contractor shall present an itemized accounting together with appropriate supporting data for the purposes of considering additions or deductions to the Contract Amount. Supporting data shall include but is not limited to the following:

- a. Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and worker or workmen's compensation insurance;
- b. Cost of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- c. Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;

- d. Costs of premiums for all bonds and insurance, permit fees, and sales, use of similar taxes related to the Work; and
- e. Additional costs of supervision and field office personnel directly attributable to the change. (General Conditions)

The burden of proof of cost rests upon the Contractor. Contractor agrees that DBA or Owner's Representative shall have the right, at reasonable times, to inspect and audit the books and records of Contractor to verify the propriety and granting of such cost.

7.2.2.3 Compute requests for changes be they additions or deductions as follows:

- a. For work performed by the Contractor which results in an overall increase in the contract sum: example

Net Cost of Materials	a. _____
State Sales Tax	b. _____
Net Placing Cost <u>including Owner approved General Conditions</u>	c. _____
W.C. Insurance Premium and FICA Tax	d. _____
Subtotal of a+b+c+d: _____	
Overhead and Profit, shall not exceed 12% x (a+b+c+d)	e. _____
Allowable Bond Premium	f. _____
<b>TOTAL COST</b>	a+b+c+d+e+f : _____

- b. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the contract sum shall be actual net cost as computed as outlined in 7.2.2.3.a (a. through e.) and confirmed by the Design Professional. Credit for work deleted shall be computed as outlined in 7.2.2.3.a (a. through e.), except the Contractor's share of overhead and profit percentage is not less than seven (7) percent.
- c. For added work performed by Subcontractors: Subcontractors shall compute their work as outlined in 7.2.2.3.a (a. through e.) to the cost of that portion of the work (Change) that is performed by the Subcontractor. The Contractor overhead and profit change shall not exceed five (5) percent plus the allowable bond premium.

- d. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the contract sum by a Subcontractor shall be actual net cost as computed as outlined in 7.2.2.3.a (a. through e.) and confirmed by the Design Professional for work deleted by a Subcontractor: Subcontractors shall compute their work as outlined in 7.2.2.3.a (a. through e.), except that the overhead and profit shall be not less than seven (7) percent and the Contractor's overhead and profit shall be not less than five (5) percent.

### **7.3 PAYMENT FOR CHANGES IN THE WORK**

- 7.3.1 All changes in the Work will be paid for in the manner indicated in Article 4, Paragraph 4.2, and the compensation thus provided shall be accepted by the Contractor as payment in full for the use of small tools, superintendent's services, premium on bond, and all other overhead expenses incurred in the prosecution of such work.
- 7.3.2 The Owner shall not be deemed to have agreed to any costs for additional work, to have agreed to additional time for completion, or to have agreed to any other change in the terms and conditions of the Contract Documents until Owner, Design Professional and Contractor have executed a Change Order to this Contract, and the Change Order is approved by DBA.

## **ARTICLE 8 -- TIME**

### **8.1 DEFINITIONS**

- 8.1.1 Contract Time is the period of time identified in the Contract Documents for Substantial Completion of the Work, including authorized adjustments made as part of Change Orders agreed to by the Owner, Contractor, Design Professional and DBA.
- 8.1.2 Date for commencement of the Work is the fifth calendar day following the start date listed on the Notice to Proceed, unless otherwise stated in the Contract.
- 8.1.3 Date of Substantial Completion is the date certified by the Design Professional, the Owner and DBA.

### **8.2 PROGRESS**

- 8.2.1 Time limits identified in the Contract Documents are of the essence of the Contract. The Contractor confirms that the Contract Time is a reasonable period of time for performing the Work.

### **8.3 HOLIDAYS**

- 8.3.1 New Year's Day, Robert E. Lee/Dr. Martin Luther King's Birthday, President's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and the day thereafter, Christmas Eve and Christmas Day will be considered as being legal holidays; no other days will be considered unless declared by the Governor of the State of Arkansas through an Executive Order or Proclamation. No Design Professional clarifications, observations, or State inspections will be provided on legal holidays, Saturdays and Sundays, and no work shall be performed on these days except in an emergency or with written approval in advance by the Design Professional and Owner.

#### **8.4 DELAYS**

- 8.4.1 Delays beyond the Contractor's control occasioned by an act or omission on the part of the Owner, strikes, fires, additions to the Work, delays by any separate contractor employed by the Owner, extremely abnormal weather conditions, or other delays beyond the Contractor's control may, if agreed to by Change Order by the Contractor, Owner, Design Professional and DBA entitle the Contractor to an extension of time in which to complete the Work. While such delays may be just cause for an extension of the Contract Time, the Contractor shall not have a claim for damages for any such cause or delay.

### **ARTICLE 9 -- PAYMENTS AND COMPLETION**

#### **9.1 CONTRACT SUM**

- 9.1.1 The Contractor shall accept the compensation, as herein provided, in full payment for furnishing all materials, equipment, labor, tools, and incidentals necessary to complete the Work and for performing all Work contemplated and embraced under the Contract. Also, for loss or damage arising from the nature of the Work, from the action of the elements or from any unforeseen difficulties which may be encountered during the prosecution of the Work until the final acceptance by the Design Professional and Owner; and for all risks of every description connected with the prosecution of the Work; for all expenses incurred in consequence of the suspension or discontinuance of the Work as specified; and for any infringement of patent, trademark, or copyright, and for completing the Work according to the Contract Documents. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

9.1.2 No moneys payable under Contract or any part thereof, except the estimate for the first month or period, shall become due and payable if the Owner so elects until the Contractor shall satisfy the said Owner that he has fully settled or paid for all materials and equipment used in or on the Work and labor done in connection therewith, and the Owner, if he so elects, may pay any or all such bills wholly or in part and deduct the amount or amounts so paid from any monthly or final estimate excepting the first estimate.

9.1.3 In the event the surety on any contract or payment bond given by the Contractor becomes insolvent, or is placed in the hands of a receiver, or has the right to do business in a state revoked as provided by law, the Owner may at its election withhold payment of any estimate filed or approved by the Design Professional until the Contractor shall give a good and sufficient bond in lieu of the bond so executed by such surety. Any and all subsequent bonds shall be filed with the Circuit Clerk of the County in which the Work is being performed.

## **9.2 SCHEDULE OF VALUES**

9.2.1 The Contractor shall submit to the Design Professional a schedule of values for each part of the Work. The schedule shall be a complete breakdown of labor and materials for the various parts of the Work including an allowance for profit and overhead. The total of these amounts shall equal the Contract Sum. The approved schedule of values shall be used as a basis for the monthly payments to the Contractor. In applying for the monthly payment, the Contractor shall show a detailed account of work accomplished in conformity with the schedule.

## **9.3 MEASUREMENT OF QUANTITIES**

9.3.1 The Contractor shall be paid for all Work performed under the Contract based on Design Professional computations of as-built quantities and the Contractor's Contract Sum. This payment shall be full compensation for furnishing all supplies, materials, tools, equipment, transportation, and labor required to do the Work; for all loss or damage, because of the nature of the Work, from the action of the elements or from any unforeseen obstruction or difficulty which may be encountered in the prosecution of the Work and for which payment is not specifically provided for all or any part of the Work; and for well and faithfully completing the Work in accordance with the Contract Documents. The method of computation and payment for each item shall be as set forth in the Specifications or the Supplementary Conditions.

## **9.4 REQUESTS FOR PAYMENT**

- 9.4.1 The Contractor may submit periodically, but not more often than once each month, a Request for Payment for work completed. When unit prices are specified in the Contract Documents, the Request for Payment shall be based on the quantities completed.
- 9.4.2 Unless otherwise provided in the Contract Documents, payments will be made on account of materials or equipment not incorporated in the Work to date but delivered and suitably stored at the site, and if approved in advance by the Owner, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner and the Design Professional to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest including applicable insurance and transportation to the site for those materials and equipment stored off the site.
- 9.4.3 The Contractor shall furnish the Design Professional all reasonable facilities and job tickets required for obtaining the necessary information relative to the progress and execution of the Work and the measurement of quantities. Each Request for Payment shall be computed from the Work completed on all items listed in the approved schedule of values less five (5) percent (retainage) of the adjusted Contract Sum and less previous payments to the Contractor on the Contract. Retainage may be waived pursuant to the process and procedures as stated in 9.5.2.

**9.5 PERIODIC ESTIMATES FOR PAYMENT**

- 9.5.1 Unless otherwise stated in the Specifications or Supplementary Conditions, the Owner shall cause the Design Professional to prepare an Estimate for Payment to the Contractor each month. The Design Professional will make the estimate for the materials complete in place and the amount of work performed in accordance with the Contract between the twenty-fifth day of the month and the fifth day of the succeeding month.

- 9.5.2 From the total of the amount estimated to be paid, an amount equal to five (5) percent of the total completed shall be retained from each payment request. The Owner may waive withholding retainage of the progress payments if both of the Design Professional and Owner agree the Work is fifty (50) percent complete and the Contractor has provided the Work in a satisfactory manner. Nothing in the proceeding sentence shall be construed as prohibiting the Owner from maintaining the withholding of retainage (5%) throughout the entire project. All sums withheld by the Owner and requested in a Final Pay Request prepared by the Owner or Contractor will be paid to the Contractor within 30 days after the Contract has been completed and the work approved by DBA. No retainage will be withheld on that amount of the progress payment pertaining to the cost of materials stored at the site or within a bonded warehouse.

**9.6 PAYMENT FOR INCREASED OR DECREASED QUANTITIES**

- 9.6.1 When alterations in the quantities of work not requiring Contract modifications are ordered and performed, the Contractor shall accept payment in full at the Contract Sum, for the actual quantities of work accomplished. No allowance will be made for anticipated profits. Increased or decreased work involving Contract modifications shall be paid for as stipulated in such Contract modifications.

**9.7 DESIGN PROFESSIONAL'S ACTION ON A REQUEST FOR PAYMENT (See also 9.9)**

- 9.7.1 The Owner shall cause the Design Professional to, within five working days plus time required for transmittal from one party to another, act on a Request for Payment by the Contractor in one of the following:
- a. Approve the Request for Payment as submitted by the Contractor, and transmit same to the Owner.
  - b. Approve an adjusted amount, as the Design Professional will decide is due the Contractor informing the Contractor in writing of the reason for the adjusted amount, and transmit same to the Owner.
  - c. Withhold the Request for Payment submitted by the Contractor informing the Contractor, Owner and DBA in writing of the reason for withholding the request.

**9.8 ACTION ON A REQUEST FOR PAYMENT AND FINAL PAYMENT**  
(See also 9.9)

- 9.8.1 The Owner will, within five working days plus transmittal time between the various state agencies involved, act on a Request for Payment (not Final) after approval by the Design Professional by one of the following:

- a. Approve the Request for Payment as approved by the Design Professional and process the payment.
  - b. Approve payment of an adjusted amount as the Owner will decide is due the Contractor, informing the Contractor and the Design Professional in writing of the reason for the adjusted amount of payment.
  - c. Withhold the Request for Payment informing the Contractor and the Design Professional in writing of the reason for withholding the payment.
- 9.8.2 The State shall process payments in accordance with Ark. Code Ann. §19-4-1411, which establishes the time limits for the Design Professional, the Owner, and the Department of Finance and Administration. It also authorizes the Chief Fiscal Officer of the State to investigate any complaints of late payments and assess penalties for late payment. Complaints shall be addresses to: Chief Fiscal Officer of the State: Department of Finance and Administration; 1509 West Seventh Street, Suite 401; Post Office Box 3278; Little Rock, AR 72203-3278.
- 9.8.3 The Design Professional or the State may withhold payment for contested issues, including but not limited to, defective work on the project; evidence indicating the probable filing of claims by other parties against the Contractor related to the project; damage caused to another contractor; reasonable evidence that Work cannot be completed for the unpaid balance of the Contract Sum or within Contract Time or failure of the Contractor to make payments on materials, equipment or labor to subcontractors. It is the responsibility of the contesting party to notify the Contractor in writing that payment has been contested and the reasons why. The notification must be done within the timeframe specified for processing of payment under Ark. Code Ann. §19-4-1411.

**9.9 PAYMENT FOR UNCORRECTED WORK**

- 9.9.1 Should the Design Professional direct the Contractor not to correct work that has been damaged or that was not performed in accordance with the Contract Documents, an equitable deduction from the Contract Sum shall be made to compensate the Owner for the uncorrected work. The Design Professional shall determine the amount of the equitable deduction.

**9.10 PAYMENT FOR REJECTED MATERIALS AND WORK**

- 9.10.1 The removal of rejected Work and materials and the re-execution of acceptable work by the Contractor shall be at the expense of the Contractor. The Contractor shall pay the cost of replacing the work of other contractors destroyed or damaged by the removal of the rejected work or materials and the subsequent replacement with acceptable work.

#### **9.11 DATE OF SUBSTANTIAL COMPLETION**

- 9.11.1 A Certificate of Substantial Completion, which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to work, and insurance and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion, unless another timeframe is stated in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall not become effective until approved by DBA.

#### **9.12 FINAL COMPLETION AND PAYMENT BY OWNER**

- 9.12.1 The Contractor shall furnish a letter from the Design Professional attached to the Contractor's final estimate, which shall include all retainage withheld, certifying that the Design Professional has received and approved all guarantees, bonds, maintenance and operation manuals, air balance data, shop drawings, catalog data, and record documents specified in the Contract Documents.
- 9.12.2 Before final payment, the Contractor shall furnish to the Design Professional executed copies of the Release of Claims and Consent of the Performance and Payment Bond Surety for Final Payment. Items listed in this Section Nine (9) shall be submitted with and at the same time as the final estimate to the Design Professional and shall be promptly delivered by the Design Professional to the Owner. No final payment or release of retained amounts shall be made without complete compliance with this Section Nine (9), and approval by the Owner and DBA of the Final Pay Request, which shall include payment of all retained amounts.
- 9.12.3 Any claim by the Contractor to the Owner for interest on a delinquent final payment shall only be made pursuant to Ark. Code Ann. § 22-9-205.

#### **9.13 PARTIAL OCCUPANCY OR USE**

- 9.13.1 The Owner may occupy or use any completed or partially completed portion of the Work provided such use or occupancy is consented to by the insurer and authorized. The Contractor will prepare a list of items to be completed or corrected before partial acceptance. Upon receipt of the Contractor's list, the Design Professional will make an inspection to determine whether the Work or portion thereof is substantially complete. No portion of the work shall be considered substantially complete unless described in a Certificate of Substantial Completion Form approved by the Contractor, Owner, Design Professional and DBA.
- 9.13.2 The Design Professional will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to Work and insurance, identify work items to be corrected or completed by the Contractor and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion, unless another timeframe is stated in the Certificate of Substantial Completion. No retained amounts shall be paid until the Contractor, Design Professional, Owner and DBA approve a Certificate of Final Completion for all of the Work unless specifically provided for by this contract, and all other conditions for final acceptance of this Work are met to the satisfaction of the Owner and DBA.
- 9.13.3 If the contract documents allow for phased work and those phased sections of the project are completed, the retained amounts shall be paid in direct proportion to the value of the part of the capital improvement project completed as approved by the Contractor, Design Professional, Owner, and DBA and all other conditions of this Section Nine (9) are met by the Contractor.

**9.14 FINAL INSPECTION**

- 9.14.1 Tests, inspections, and approvals of portions of the Work required by the Contract Documents, laws, ordinances, or any public authority having jurisdiction shall be made at the appropriate time. The Contractor shall give the Design Professional timely notice of when and where tests and inspections shall be made so that the Design Professional may be present. The Contractor shall make arrangements for the testing and inspection with an independent testing laboratory.

- 9.14.2 The Contractor shall ensure that the final completed work is in accordance with the Contract Documents. Required certificates of testing and inspection shall be secured by the Contractor and delivered to the Design Professional, unless otherwise required by the Contract Documents. The Design Professional (or Owner, in the absence of a design professional) will coordinate the scheduling of the final inspection with all parties, to include specifically the DBA Observer. Upon completion of all work, including but not limited to the punch list items, all parties will execute the Certificate of Final Completion form setting forth the final completion date.

**9.15 ASSIGNMENT OF WARRANTIES**

- 9.15.1 All warranties of materials and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner on completion of the Work and at such time as the Contractor receives final payment.
- 9.15.2 In case of warranties covering work performed by Subcontractors, such warranties shall be addressed to and in favor of the Owner. The Contractor shall be responsible for delivery of such warranties to the Owner prior to final acceptance of the work.
- 9.15.3 Delivery of guarantees or warranties shall not relieve the Contractor from any obligation assumed under any provision of the Contract. All warranties shall be for one year from the date of Substantial Completion of the Project, unless noted differently in the contract documents or extended otherwise.

**9.16 ACCEPTANCE AND FINAL PAYMENT**

- 9.16.1 Upon receipt of written notice that the Work is ready for final inspection, the Design Professional together with the Owner and DBA will conduct such inspection and when the Design Professional determines the work is acceptable to the Design Professional, Owner and DBA the Design Professional shall certify his acceptance to the Owner. Final Payment shall be the Contract Sum plus approved Change Order additions less approved Change Order deductions and less previous payments made. The Contractor shall furnish evidence that he has fully paid all debts for labor, materials, and equipment incurred in connection with the Work.

The Owner, upon approval by the Design Professional of all documentation to be provided by the Contractor in accordance with this Section 9, and approval by the Design Professional, Contractor, Owner and DBA of the Certificate of Final Completion will accept the Work and release the Contractor, except as to the conditions of the Performance and Payment Bond, any legal rights of the Owner, required guarantees and correction of faulty work after Final Payment, and shall authorize payment of the Contractor's final Request for Payment. The Contractor must allow sufficient time between the time of completion of the work and approval of the final Request for Payment for the Design Professional to assemble and check the necessary data.

- 9.16.2 Acceptance of final payment by the Contractor shall constitute waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Request for Payment. Any claims for interest on delinquent payments shall be made pursuant to Ark. Code Ann. § 22-9-205.

## **ARTICLE 10 -- PROTECTION OF PERSONS AND PROPERTY**

### **10.1 GENERAL**

- 10.1.1 The Contractor shall at all times exercise precaution for the safety of employees on the Project and of the public, and shall comply with all applicable provisions of federal, state and municipal safety laws and applicable building and construction codes. The Contractor shall provide and maintain passageways, guard fences, lights, and other facilities for protection required by all applicable laws. All machinery, equipment, and other physical hazards shall be guarded in accordance with all federal, state or municipal laws or regulations.
- 10.1.2 The Work, from commencement to completion, and until written acceptance by the Design Professional, Owner and DBA or to such earlier date or dates when the Owner may take possession and control in accordance with Section Nine (9) of these General Conditions, shall be under the charge and control of the Contractor and during such period of control by the Contractor, all risks in connection therewith shall be borne by the Contractor. The Contractor shall make good and fully repair all damages to the Project by reason of the Contractor's negligence, and make good on all injuries to persons caused by any casualty or cause by reason of the Contractor's negligence. The Contractor shall adequately protect adjacent Property as provided by law and the Contract Documents. The Contractor shall hold the Owner and DBA harmless from any and all claims for injuries to persons or for damage to property during the control by the Contractor of the project or any part thereof.

- 10.1.3 The Contractor shall at all times so conduct the Work as to ensure the least possible obstruction to traffic, to the general public, and the residents in the vicinity of the Work, and to ensure the protection of persons and property. No road, street, or highway shall be closed to the public except with the permission of the Owner and proper governmental authority. Fire hydrants on or adjacent to the Work shall be kept accessible to fire fighting equipment at all times. The local fire department shall be notified of the temporary closing of any street.

## **ARTICLE 11 -- INSURANCE AND BONDS**

### **11.1 INSURANCE REQUIREMENTS**

- 11.1.1 The Contractor shall purchase and maintain in force during this Contract such insurance as is specified within the Contract Documents, from an insurance company authorized to write the prescribed insurance in the jurisdiction where the Project is located as will protect the Contractor, his subcontractors, and the Owner from claims for bodily injury, death, or property damage which may arise from operations under this Contract, and will protect him from claims set forth which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by himself or by anyone directly or indirectly employed by any of them, or by anyone for whose acts may of them be liable.

The Contractor shall not commence work under this Contract until he has obtained all the insurance required, has filed the Certificate of Insurance with the Owner, and the certificate has been approved by the Owner. Each insurance policy shall contain a clause providing that it shall not be canceled by the insurance company without written notice to the Owner of intention to cancel in accordance with Ark. Code Ann. § 23-66-206. The Contractor is required to provide liability insurance with the additional insured endorsement that is primary non-contributory. All policies shall contain a waiver of the Contractor's right of subrogation against the State of Arkansas, its departments, agencies, boards, commissions, colleges and its officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Contractor.

- 11.1.2 Workers' Compensation and Employers' Liability Insurance in statutory limits shall be secured and maintained as required by the laws of the State of Arkansas. This insurance shall cover all employees who have performed any of the obligations assumed by the Contractor under these Contract Documents including Employers' Liability Insurance. This insurance shall protect the Contractor against any and all claims resulting from injuries, sickness, disease, or death to employees engaged in work under this Contract.

- 11.1.3 Commercial General Liability Insurance, shall be secured and maintained in force during the period of the Contract. Prior to blasting, the Contractor shall furnish Certificate of Insurance, which shall certify that damage caused by blasting is within the coverage of his Commercial General Liability Insurance to the full limits thereof. Coverage for "completed operations" shall not be excluded under this commercial general liability Insurance section.
- 11.1.4 Commercial Automobile Liability Insurance shall be secured and maintained in force during this Contract. Liability coverage shall include coverage for hired and non-owned automobiles.
- 11.1.5 Umbrella Liability shall be secured and maintained in force during term of the Contract. The Contractor shall provide a Umbrella Liability Insurance to provide additional coverage over and above the Commercial General Liability, Commercial Business Automobile Liability and the Workers' Compensation and Employers' Liability to satisfy the Contract minimum limits. The umbrella coverage shall follow form with the Umbrella limits required as shown in section 00 73 16 Insurance Requirements.
- 11.1.6 Pollution Liability Insurance shall cover the Owner costs and liabilities attributable to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; clean-up cost; and defenses, including costs and expenses (including attorney's fees) incurred in the investigation, defense or settlement of claims.

If coverage is written on a claims-made basis, Contractor represents that any retroactive dates applicable to coverage under the policy precedes the effective date of the letter; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years or as required by law beginning from the time that services under the contract are completed.

If the scope of work as defined in this Contract includes the disposal of any hazardous or non-hazardous materials from the Projects site, the Contractor must furnish to the Owner evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this Contract. Such coverage must be maintained in amounts conforming with applicable laws, rules and regulations.

Remediation: Remediation Contractor shall provide liability insurance for the removal or remediation of asbestos including the transportation and disposals of asbestos waste materials from the Project site.

- 11.1.7 Builder's Risk or Installation Floater Policy: The Contractor shall procure and maintain during the life of this Contract Builder's Risk or Installation Floater Insurance, and any extended coverage which shall cover damage for the capital improvement project. Perils to be insured are fire, lightning, malicious mischief, explosion, riot and civil commotion, smoke, sprinkler leakage, water damage, windstorm, hail, vandalism, and property theft on the insurable portion of the Project on a 100 percent completed value basis against damage to the equipment, structures, or material. Builders' risk policy shall include coverage for system testing and materials. The Owner and the Contractor, as their interests may appear, shall be named as the Insured. The Builders' Risk is not void if partial occupancy is required and a permission to occupy endorsement has been included when applicable. Builders' risk policy shall include "soft cost endorsement" in the amount of 10 percent of the total contract value.

Contractors will use the following information as guidance for the type of policy to procure which include but not limited to the following:

- a) All new building construction and major renovations will require Builders Risk insurance;
- b) Equipment installations, small renovations, utility installations, paving projects will require an Installation Floater Policy. If a determination cannot be made by the Contractor as the type of coverage required, the Contractor shall provide a written request to the Owner for clarification.

- 11.1.8 Proof of Insurance: The Contractor shall maintain the insurance coverage required by this contract (see Section 00 73 16 Insurance Requirements) throughout the term of this contract, and shall furnish the Owner with certificates of insurance which indicate the name of the insurance companies, the NAIC numbers, insured names, producer / agent names, telephone numbers, policy numbers, limits and types of coverage, effective and expiration dates of policies.

The Contractor shall supply the Owner updated replacement certificates not less than thirty days prior to the expiration date or renewal date of any insurance policies reflected on such certificates. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled, or materially altered except proper written notice pursuant Ark. Code Ann. § 23-66-206 has been received by the Owner." The notice to proceed shall not be issued until the insurance certificates have been approved by the Owner.

- 11.1.9 Additional Requirements: All policies shall be provided by insurers qualified to write the respective insurance in the State of Arkansas, and be in such form and include such provision as are generally considered standard provisions for the type of insurance involved. The Contractor will be financially responsible for all deductibles or self-insured retentions.

Equipment and Materials: The Contractor shall be responsible for any loss, damage, or destruction of its own property or that of any Subcontractor's equipment and materials used in conjunction with the Work. The Contractor will purchase at Contractor's own sole costs and expense such policy to cover Contractor's owned property.

Subcontractor's: The Contractor shall require all Subcontractors to provide and maintain general liability, automobile and workers' compensation insurance coverage substantially similar to those required of the Contractor. The Contractor shall require certificates of insurance from all Subcontractors as evidence of coverage. Contractor will be the responsible party for any and all claims by Subcontractors if Subcontractor fails to have appropriate insurance.

## 11.2 **BONDS**

- 11.2.1 Performance and Payment Bond: The Contractor shall, at the time of execution of the Contract, furnish bonds covering faithful performance of the Contract and the payment of obligations. Performance and Payment bonds, and any amendments thereto, shall be filed with the circuit clerk office in the County Courthouse of the county where the work shall be performed.

## **ARTICLE 12 -- UNCOVERING AND CORRECTION OF WORK**

### 12.1 **EXAMINATION OF COMPLETED WORK**

- 12.1.1 If any portion of the work should be covered contrary to the request of the Owner, Design Professional, or Inspector or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Owner, Design Professional, or Inspector, be uncovered for his observation and replaced at the Contractor's expense.

### 12.2 **DEFECTIVE WORK**

- 12.2.1 Defective work, whether through the use of defective materials, the result of poor workmanship, or any other cause, shall be removed within ten days after notice is given by the Owner or Design Professional. The Work and affected materials and equipment shall be removed and replaced as necessary to comply with the Contract Documents without additional cost to the Owner. The fact that the defective work may have been previously overlooked by the Design Professional shall not constitute acceptance.

### **12.3 REJECTED MATERIALS**

- 12.3.1 Materials which do not conform to the requirements of the Contract Documents, are not equal to samples approved by the Design Professional, or are in any way unsuited or unsatisfactory for the purpose for which intended, shall be rejected. Defective materials shall be removed within ten days after notice by the Design Professional. The materials shall be replaced with new materials as necessary to comply with the Contract Documents at no additional cost to the Owner. The fact that the defective material may have been previously overlooked by the Design Professional shall not constitute acceptance.
- 12.3.2 Should the Contractor fail to remove and replace rejected material within the specified ten days after written notice to do so, the Owner may remove and replace the material and deduct the cost from the Contract Sum.

### **12.4 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT**

- 12.4.1 The approval of the final Request for Payment by the Design Professional and the making of the Final Payment by the Owner to the Contractor shall not relieve the Contractor of responsibility to correct faulty materials or workmanship promptly after receipt of written notice from the Owner until the end of the Contractor's warranty or performance and payment bond obligations or both. The Owner shall give such notice of faulty materials or workmanship promptly, after discovery of the condition. If the Contractor fails to correct the defects, promptly, after receipt of written notice from Owner, the Owner may have the work corrected at the Contractor's expense.

## **ARTICLE 13 -- MISCELLANEOUS PROVISIONS**

### **13.1 GOVERNING LAW**

13.1.1 The Contract shall be governed by the laws and regulations of the STATE OF ARKANSAS. Venue for any administrative action or judicial proceedings shall be Pulaski County, Arkansas. Nothing in these General Conditions shall be construed to waive the sovereign immunity of the STATE OF ARKANSAS or any entities thereof.

13.1.2 The Contractor shall give all notices and comply with all federal, state, and local laws, ordinances, and regulations in any manner affecting the conduct of the Work. The Contractor shall indemnify and save harmless the Owner and DBA against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree whether by himself or his employees.

13.1.3 The Contractor shall comply with the laws of the local, state, and federal government regarding wages and hours of labor.

## 13.2 **WRITTEN NOTICE**

13.2.1 Consider as served when delivered in person or sent by certified or registered mail to the individual, firm, or corporation or to the last business address of such known to him who serves the notice. Failure to accept or receive the hand delivered, certified, or registered mail does not negate the consideration of serving.

13.2.2 The written Notice to Proceed with the Work shall be issued by the Design Professional after the execution of the Contract by the Owner. The Contractor shall begin and prosecute the Work uninterruptedly in a manner that will complete the Work within the time limits stated in the Contract.

## 13.3 **TESTS AND INSPECTIONS**

13.3.1 All materials and each and every part of the Work shall be subject at all times to inspection by the Owner, Design Professional, or the Inspector. The Contractor shall be held to the intent of the Contract Documents in regard to quality of materials, equipment, and workmanship, and the diligent execution of the Contract. The inspection may extend to and include plant, shop, or factory inspection of material furnished. The Contractor agrees to allow Federal or State inspectors, acting in an official capacity, to have access to the job site.

13.3.2 The Owner, Design Professional, DBA and the Inspector shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection for ascertaining if the Work as performed is in accordance with the requirements and the Contract Documents.

- 13.3.3 Inspectors shall only have authority to suspend any work in a life-threatening situation, which is being improperly done, subject to the final decision of the Owner or Design Professional. Inspectors shall have no authority to permit deviations, or to relax provisions of the Contract Documents without the written permission or instruction of the Owner, DBA or Design Professional, or delay the Contractor by failing to work with reasonable promptness.

**13.4 VERBAL AGREEMENTS**

- 13.4.1 No verbal objection, order, claim, or notice by any of the parties involved to the other parties shall affect or modify any of the terms or obligations contained in the Contract Documents. None of the terms or provisions of the Contract Documents shall be considered waived or modified unless the waiver or modification thereof is in writing, and agreed upon by the parties in the form of a Change Order approved by the Owner, Design Professional, Contractor and DBA, and no evidence shall be introduced in any proceeding of any other waiver or modification.

**ARTICLE 14 -- TERMINATION OR SUSPENSION OF THE CONTRACT**

**14.1 SUSPENSION OF WORK**

- 14.1.1 The Work or any portion thereof may be suspended at any time by the Owner provided that the Owner gives the Contractor written notice of the suspension. The notice shall set forth the date on which the Work is to be suspended and the date on which the Work is to be resumed. The Contractor shall resume the Work upon written notice from the Owner within ten days after the date set forth in the notice of suspension.
- 14.1.2 The Owner will have the authority to suspend the work, wholly or in part, for such period of time as deemed necessary. The suspension may be due to unsuitable weather, or such other conditions as are considered unfavorable for the proper prosecution of the Work, or the failure on the part of the Contractor to fulfill the provisions of the Contract. Failure to supply material, equipment, or workmanship meeting the requirements of the Contract Documents shall be just cause for suspension of the Work. The Contractor shall not have the right to suspend operations without the Design Professional or Owner's permission.

**14.2 TERMINATION BY OWNER FOR CAUSE**

14.2.1 The Owner will have the right to terminate the Contract upon giving ten days written notice of the termination to the Contractor and the Contractor's surety, in the event of any default by the Contractor and upon written notice from the Design Professional to the Owner that sufficient cause exists to justify such action. In the event of termination of the Contract, the Owner may take possession of the Work and of all materials, tools, and equipment and construction equipment and machinery thereon and may finish the work by whatever method he may select. However, Owner will not have the right to terminate without providing Contractor with reasonable opportunity to cure such default to Owner's reasonable satisfaction. If the Owner does not elect to use his own forces, the surety shall furnish a competent licensed contractor within 10 working days from the written notice to the surety.

14.2.2 It shall be considered a default by the Contractor whenever he shall become insolvent; declare bankruptcy assigns assets for the benefit of his creditors; fails to provide qualified superintendence, proper materials, competent Subcontractors, competent workmen; fails to make prompt payments for conforming labor, materials, or equipment; disregards or violates provisions of the Contract Documents; disregards the Owner's, Design Professional's, or DBA instructions; fails to prosecute the Work according to the approved schedule of completion, including extensions thereof as provided for by approved Change Orders; and fails to start the Work on the date established in the Notice to Proceed.

#### 14.3 **TERMINATION BY OWNER FOR CONVENIENCE**

The Owner will have the right to terminate the Contract for Convenience and without cause upon giving ten days written notice of the termination to the Contractor and Contractor's surety and DBA. Once notice is received, the Contractor shall: cease all operations as indicated by the written notice and take necessary actions or at the Owner's direction as indicated by the written notice, for the protection and preservation of the work; and terminate existing Subcontractors and purchase orders upon the effective termination date as indicated in the notice and not enter into any contracts involving Subcontractors or purchase orders.

If the contract is terminated upon the convenience of the Owner, the Contractor is entitled to receive payment for the work executed and accepted by the Owner, and the overhead and profit credit amount of 1% of the work that was left to be performed in the contract unless the termination was due to the Owner's loss of funding in which case no amount for overhead and profit will be credited.

### **ARTICLE 15 – DISPUTE RESOLUTION**

#### 15.1 **CONTRACTUAL DISPUTES**

- 15.1.1 In the event that a dispute, claim or controversy between the Owner and the Contractor arises regarding the requirements of the Contract, the performance of the Work, payment due the Contractor, the terms of any Change Order, or otherwise, the Contractor shall not stop, suspend or delay the Work or any part of the Work to be performed under the Contract, or under any Change Order, or as ordered by the Owner. The Contractor shall continue to diligently prosecute the Work to completion, including work required in any Change Order or as directed by the Owner.

## 15.2 **MEDIATION**

- 15.2.1 In the event of any dispute regarding the Contractor and the Owner (hereinafter referred to as party/parties for this section only) under this Agreement, the party shall provide written notification to the DBA Construction Section.
- 15.2.2 If the Owner or the Contractor are unable to negotiate a settlement of the dispute amongst themselves, the parties may participate in mediation. Mediation shall be voluntary, non-binding and all proceedings in connection with such shall be subject to this Agreement and applicable provisions of Arkansas law. A request for mediation must be made in writing to the other party and the parties shall agree upon the location of the mediation. A Mediator mutually agreed upon by the parties shall conduct the mediation process. Any mediation fees shall be borne equally between the parties. The parties shall coordinate mediation and the Owner shall notify DBA of any mediation prior to it taking place. DBA Construction Administrator or his designee may view any and all mediation proceedings. Any settlements arising out of the voluntary mediation process must be approved by DBA.
- 15.2.3 Notwithstanding anything to the contrary contained herein, if any dispute arises between the Parties, whether or not it requires at any time the use of dispute resolution procedures described above, in no event, nor for any reason, shall the Contractor, Architect, or Engineer interrupt the provision of services/performance to the Owner, or perform any other action that prevents, slows down, or reduces, in any way, the provisions of the Agreement unless: (a) authority to do so is granted by the Owner and approved by DBA or (b) the Agreement has been terminated by the State. Nothing in these contract documents, including the use of mediation, shall be construed to waive the sovereign immunity of the State of Arkansas or any entities thereof.

## 15.3 **ARBITRATION**

- 15.3.1 In the event of any dispute regarding the Contractor and the Owner (hereinafter referred to as party/parties for this section only) under this Agreement, the party shall provide written notification to the DBA Construction Section.

- 15.3.2 If the Owner or the Contractor are unable to negotiate a settlement of the dispute amongst themselves, the parties may participate in arbitration. Arbitration shall be voluntary, binding and all proceedings in connection with such shall be subject to this Agreement and applicable provisions of Arkansas law. A request for arbitration must be made in writing to the other party and the parties shall agree upon the Arbitrator, process and procedures and the location of arbitration. Any arbitration fees shall be borne equally between the parties. The parties shall coordinate arbitration and the Owner shall notify DBA of any arbitration prior to it taking place. DBA Construction Administrator or his designee may view any and all arbitration proceedings. Any settlements arising out of the voluntary arbitration process must be approved by DBA.
- 15.3.3 Notwithstanding anything to the contrary contained herein, if any dispute arises between the Parties, whether or not it requires at any time the use of dispute resolution procedures described above, in no event, nor for any reason, shall the Contractor, Architect, or Engineer interrupt the provision of services/performance to the Owner, or perform any other action that prevents, slows down, or reduces, in any way, the provisions of the Agreement unless: (a) authority to do so is granted by the Owner and approved by DBA or (b) the Agreement has been terminated by the State. Any award rendered by the arbitrator shall be final with the approval of DBA. Nothing in these contract documents, including the use of arbitration, shall be construed to waive the sovereign immunity of the State of Arkansas or any entities thereof.

**END OF DOCUMENT**

**Insurance Requirements**  
**Section 00 73 16 / Rev: April 2021**

**Article 11 - Insurance and Bonds**

(see General Conditions Article 11 for additional information)

1) Subparagraph 11.1.1, add the following sentence:

The amount of such insurance shall be not less than the following or any limits required by law.

2) Subparagraph 11.1.2, add the following clause:

11.1.2.1 Workers' Compensation

a. State	<u>Statutory</u>
b. Applicable Federal	<u>Statutory</u>
c. Employers' Liability	Per Accident: <u>\$500,000</u>
	Disease, Policy Limit: <u>\$500,000</u>
	Disease, Each Employee: <u>\$500,000</u>

3) Subparagraph 11.1.3, add the following clause:

11.1.3.1 Commercial General Liability

General Aggregate:	Per Project Aggregate: <u>\$2,000,000</u>
Completed Operations: (to be maintained for one year after final payment)	Aggregate: <u>\$1,000,000</u>
Personal Injury:	Each Occurrence: <u>\$1,000,000</u>
Each Occurrence Limit:	Each Occurrence: <u>\$1,000,000</u>

4) Subparagraph 11.1.4, add the following clause:

11.1.4.1 Automobile Liability: (including, non-owned and hired vehicles)	Combined Single Limit: <u>\$1,000,000</u>
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5) Subparagraph 11.1.5, add the following clause:

11.1.5.1 Umbrella Liability:	Each Occurrence: <u>\$1,000,000</u>
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6) Subparagraph 11.1.6, add the following clause:

11.1.6.1 Pollution Liability:	Per Loss: <u>N/A</u>
	Aggregate: <u>\$0</u>

7) Subparagraph 11.1.7, add the following clause:

11.1.7.1 Builder's Risk or Installation Floater Policy:	<u>\$ = Contract Amount</u>
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8) Contractor shall deliver to the Owner a copy of each Insurance certificate and any other requested supporting document for the Owners review and approval prior to the issuance of the Notice to Proceed and any work being performed.

Please Note: Policy Certificates of Insurance shall state "The insurance covered by this certificate will not be cancelled, or materially altered except after proper written notice pursuant Ark. Code Ann. § 23-66-206 has been received by the Owner."

End of Document



**Health and Safety Requirements**  
**Section 00 73 19 / Rev: April 2021**



**Wage Rate Requirements**  
**Section 00 73 43 / Rev: April 2021**

**Bidders are hereby notified that prevailing wage rates do not apply.**

N/A



**BIDDING ADDENDA**  
**Section 00 91 13 / Rev: April 2021**

Date:

Addendum Number:

Project Number: 8652102R

Agency Name: ADPHT - AHPP

The proposed contract documents for this work are modified as follows:

**1 INVITATION TO BID**

**2 SPECIFICATIONS**

**3 DRAWINGS**



# Contract and Grant Disclosure and Certification Form

Failure to complete all of the following information may result in a delay in obtaining a contract, lease, purchase agreement, or grant award with any Arkansas State Agency

Subcontractor: Subcontractor Name:

☐ Yes ☐ No

Taxpayer ID Name: ☐ Is This For: ☐ Goods? ☐ Services? ☐ Both?

Your Last Name: First Name: M.I.

Address:

City: State: Zip Code: Country:

**AS A CONDITION OF OBTAINING, EXTENDING, AMENDING, OR RENEWING A CONTRACT, LEASE, PURCHASE AGREEMENT, OR GRANT AWARD WITH ANY ARKANSAS STATE AGENCY, THE FOLLOWING INFORMATION MUST BE DISCLOSED**

## FOR INDIVIDUALS \*

Indicate below if you, your spouse or the brother, sister, parent, or child of you or your spouse is a current or former: member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee:

Position Held	Mark (x)		Name of Position of Job Held (senator, representative, name of board/ commission, data entry, etc.)	For How Long?		What is the person(s) name and how they relate to you? (i.e. Jane Q. Public, Spouse, John Q. Public, Jr., child, etc.)	Relation
	Current	Former		From MM/YY	To MM/YY		
General Assembly							
Constitutional Officer							
State Board or Commission Member							
State Employee							

☐ None of the above applies

## FOR AN ENTITY (BUSINESS) \*

Indicate below if any of the following persons, current or former, hold any position of control or hold any ownership interest of 10% or greater in the entity: member of the General Assembly, Constitutional Officer, State Board or Commission Member, State Employee, or the spouse, brother, sister, parent, or child of a member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee. Position of control means the power to direct the purchasing policies or influence the management of the entity.

Position Held	Mark (x)		Name of Position of Job Held (senator, representative, name of board/ commission, data entry, etc.)	For How Long?		What is the person(s) name and what is his/her % of ownership interest and/or what is his/her position of control?	Ownership Interest (%)	Position of Control
	Current	Former		From MM/YY	To MM/YY			
General Assembly								
Constitutional Officer								
State Board or Commission Member								
State Employee								

☐ None of the above applies

\* Note: Please list additional disclosures on separate sheet of paper if more space is needed.



## Contract and Grant Disclosure and Certification Form

Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the agency.

As an additional condition of obtaining, extending, amending, or renewing a contract with a state agency I agree as follows:

1. Prior to entering into any agreement with any subcontractor, prior or subsequent to the contract date, I will require the subcontractor to complete a **Contract and Grant Disclosure and Certification Form**. Subcontractor shall mean any person or entity with whom I enter an agreement whereby I assign or otherwise delegate to the person or entity, for consideration, all, or any part, of the performance required of me under the terms of my contract with the state agency.

2. I will include the following language as a part of any agreement with a subcontractor:

*Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this subcontract. The party who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the contractor.*

3. No later than ten (10) days after entering into any agreement with a subcontractor, whether prior or subsequent to the contract date, I will mail a copy of the **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM** completed by the subcontractor and a statement containing the dollar amount of the subcontract to the state agency.

**I certify under penalty of perjury, to the best of my knowledge and belief, all of the above information is true and correct and that I agree to the subcontractor disclosure conditions stated herein.**

Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Vendor Contact Person \_\_\_\_\_ Title \_\_\_\_\_ Phone Number \_\_\_\_\_

Agency Use Only				
Agency Number	Agency Name	Agency Contact Person	Contact Phone #	Contract or Grant Number
8652102R	ADPHT - AHPP	Marlon Mowdy	(870)499-0556	8652102R



# INDEX OF DRAWINGS

## GENERAL

T1	TITLE SHEET, INDEX OF DRAWINGS, AND SUMMARY OF THE WORK
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## ARCHITECTURAL

AS1.00	ARCHITECTURAL SITE PLAN, AND GENERAL SITE NOTES
AD1.01	WOLF HOUSE DEMOLITION PLANS, DEMOLITION NOTES, AND SYMBOLS LEGEND
AD2.01	WOLF CABIN DEMOLITION PLANS
AD3.01	VISITOR INFORMATION CENTER DEMOLITION PLANS AND ELEVATIONS
A1.01	WOLF HOUSE REFERENCE PLANS, ROOF PLAN, GENERAL NOTES, DETAIL, AND SYMBOLS LEGEND
A1.02	WOLF HOUSE EXTERIOR ELEVATIONS
A1.03	WOLF HOUSE ROOF, WINDOW, AND SHUTTER DETAILS
A2.01	WOLF CABIN REFERENCE PLANS, FRAMING PLAN, AND INTERIOR ELEVATION
A2.02	WOLF CABIN EXTERIOR ELEVATIONS AND CHIMNEY DETAILS
A2.03	WOLF CABIN SHUTTER ELEVATIONS, DOOR ELEVATION, AND DETAILS
A3.01	VISITOR INFORMATION CENTER FLOOR PLAN, FOUNDATION PLAN, ENLARGED PLAN, AND DETAILS
A3.02	VISITOR INFORMATION CENTER ROOF PLAN AND DETAILS
A3.03	VISITOR INFORMATION CENTER EXTERIOR ELEVATIONS
A3.04	VISITOR INFORMATION CENTER WEST ELEVATION, BUILDING SECTION, AND WINDOW DETAILS



## **SECTION 010001 – GENERAL HISTORIC PRESERVATION CONTRACTOR REQUIREMENTS**

### **PART 1 – GENERAL**

#### **1.1 SIGNIFICANT HISTORIC STRUCTURES AND SITE**

- A. This project is a combination of deferred maintenance and additional improvements to one of the most significant historic sites in the State of Arkansas. The Jacob Wolf House Historic Site is a Department of Heritage historic site, which continues to maintain and improve the site to meet the needs and curiosity of the general public. The site is and will continue to be open to the general public to tour the facility during the construction period.
- B. The Jacob Wolf House was constructed in 1828 and was used as the first permanent County Courthouse of IZARD County within the Arkansas Territory. In addition to the Jacob Wolf House, the site also includes the John Wolf Cabin (Jacob Wolf's brother), which was relocated to this site. The third building on the site is the Visitor Information Center, which was reconstructed from salvaged logs from historic structures.
- C. There are additional features, such as a cistern and wood fences, that will require improvements as described in the documents, as well as some new construction.
- D. The physical site is also protected and in the past limited archeological excavations have taken place, so the site must be protected and receive minimal disturbance to protect the below grade artifacts that have not been excavated yet.

#### **1.2 GENERAL CONTRACTOR WITH HISTORIC PRESERVATION RELATED EXPERIENCE REQUIRED**

- A. While the State of Arkansas encourages the opportunity for all general contractors to perform the required work involving historic structures and sites, it is also an obligation of the State to protect the significant historic properties and to obtain general contractors and subcontractors with experience with historic buildings or at least similar renovation type work.
- B. Following the receipt of bids, the lowest bidders being considered to perform the work will be required to submit references of the recent projects for verification of the quality, timeliness, and general attitude of cooperation displayed during the project.

- C. While it is preferred that references involving historic structures or complex renovations on non-historic buildings will be acceptable; as professional business practices and efficient project implementation is equally as important, to having a successful construction implementation. There is a significant difference between construction services required for historic properties and new construction, so new construction references will not be applicable.
- D. The successful low bidder for the project will be required to submit references for three completed projects within the past couple of years, including the following information:
  - a. Name of Project
  - b. Project location
  - c. Type of project (i.e., historic property, renovation, addition, etc.)
  - d. The name and contact information of the project owner or the owner's representative.
  - e. Name and contact information for the Architect associated with the project.
  - f. Date of final completion
  - g. Project cost
- E. Failure to provide this information when requested, within seven working days, will result in the rejection of the bidder's proposal.

### 1.3 SUBCONTRACTOR QUALIFICATIONS

- A. As per the General Conditions included within the Project Manual and normal procedures, the General Contractor is fully responsible for all work, including material purchased, provided by subcontractors. Due to the historical significance and the building's access by the general public, all work is to be performed by the appropriate craftsman.
- B. Following the receipt of bids and upon request, the bidding contractor shall provide a listing of the subcontractors proposed to perform work on the facilities.

END OF SECTION 010001

## SECTION 010007 – GENERAL PROJECT GUIDELINES

### PART 1 - GENERAL

#### 1.1 SAFETY PRECAUTIONS

- A. The supervisor should ensure that all workers wear adequate, approved protective clothing and are provided with protective equipment during work operations and as required at other times.
- B. Check manufacturer's literature for precautions and effects of products and procedures on adjacent building materials and components. Take appropriate protective measures.
- C. All work must be protected from effects of chemicals during repair or cleaning operations.
  - 1. DO NOT save unused portions of stain removal materials.
  - 2. DO NOT store any chemicals in unmarked containers.
  - 3. EXCELLENT VENTILATION MUST BE PROVIDED WHEREEVER ANY SOLVENT IS USED. USE RESPIRATORS WITH SOLVENT FILTERS.
  - 4. No use of organic solvents indoors should be allowed without substantial air movement. Use only spark-proof fans near operations involving flammable liquids.
  - 5. Provide adequate clothing and protective gear where the chemicals are indicated to be dangerous.
  - 6. Have available antidote and accident treatment chemicals where noted.
  - 7. Avoid skin contact and inhalation of any chemical. Rubber or plastic gloves should be worn when handling hazardous (flammable or toxic) chemicals.
    - a. Follow storage and handling procedures printed on the container labels of the cleaning solutions, provide good ventilation while working and thoroughly wash hands after completion of the work.
    - b. Provide protective clothing which must be worn and protective creams for exposed skin areas.
    - c. Accidental contact with unprotected skin to these materials must be treated immediately by washing with soap and water, never with solvents.
    - d. Exercise care to avoid skin contact to tool cleaning solvents and to provide adequate ventilation for clean-up operations.
- D. The Contractor shall follow all OSHA regulations and institute a hazardous communication program. Contractor shall inform the Architect, Owner, and all other contractors on the site of any hazardous chemicals being used by contractor's employees. Contractor shall provide the Architect, Owner, and all other contractors

with copies of the Material Safety Data Sheets (MSDS). Contractor shall warn other contractors in the work area of the existence of hazardous chemicals, must ensure that all containers containing hazardous chemicals, are appropriately labeled, and must not maintain an inventory of any such chemicals that exceeds OSHA Regulation. Manufacturers, suppliers, vendors, or subcontractors are required to comply with OSHA Hazard Communication Standard (29 CFR 1910.1200) and supply Architect with appropriate MSDS at the time of the initial shipment of the hazardous chemical to the project. A pre task plan must be submitted when working with caustic materials.

## 1.2 HISTORIC STRUCTURES PRECAUTIONS

- A. The principal aim of any work must be to halt the process of deterioration and stabilize the item's condition. Repair is a second option which becomes necessary only where preservation is not sufficient to ensure mid-to-long-term survival. Repair should always be based on the fundamental principle of "minimal disturbance". The following are good practices which arise from this principle:
1. Retention of as much existing materials as possible; repairing and consolidating rather than renewing.
  2. The use of additional material or structure to reinforce, strengthen, prop, tie, and/or support existing material or structure.
  3. The use of reversible process wherever possible.
  4. The item should be recorded before, during and after the work.
    - a. No smoking will be allowed by personnel performing work on or about any Historic Structures.
    - b. Architect's approval is required for any change, addition or removal of historic structural fabric or historic property.
    - c. Architect should be notified of any visible change in the integrity of the material or component whether environmental, such as biological attack, ultraviolet degradation, etc., or structural defects, such as cracks, movement or distortion.
    - d. Architectural features will be repaired rather than replaced wherever possible. Repair or replacement of missing features will be based on accurate duplications rather than conjectural designs.
    - e. Work which requires existing features to be removed, cleaned, and reused shall be accomplished without damage to the material itself, to adjacent materials, or the substrate.
    - f. Existing features removed from the building which are to be reinstalled shall be carefully labeled and stored within the building in a place where they will not be damaged or obstruct other work.
    - g. New or replacement materials/features will be permanently marked in an unobtrusive manner to distinguish them from original fabric. The manner of identification and location of these marks shall be recorded in permanent building records.

- h. Identify the historic importance of the material or feature. Review with Architect the item's merit, in persons or events, exceptional workmanship or design qualities, must be understood before decisions regarding repair, maintenance and preservation can be made.
- i. Statement of Non-Compliance: Wherever it is necessary to proceed with the use of products, under conditions which do not comply with the requirement (because of time schedule difficulties or other reasons which the supervisor determines that are crucial to the project), prepare a written statement for the Architect indicating the nature of the non-compliance, the reasons for proceeding, the extra or precautionary measures taken to ensure the best possible work, and the names of the individuals concurring with the decisions to proceed with the work.
- j. When cleaning, avoid overcleaning. Aim for achieving 85% clean. Most damage occurs when attempting to clean the last 15%.
  - 1. Do not use acid or flame tools to strip paint from stone, as it will damage the surface.
  - 2. Do not use steel ornamental spatulas or tools to scrape stone because of the likelihood of scratching, chipping or gouging, or otherwise marring the surface.

### 1.3 SUBMITTALS

#### A. Produce Data (when applicable).

- 1. Submit to Architect manufacturer's technical data for each product to be used including chemical analysis, recommendations for their application and use, and any other available technical data. Include test reports and certification substantiating that products comply with requirements.
- 2. MANUFACTURERS OFFERING OTHER THAN BRAND NAME ITEMS IDENTIFIED IN THE PROCEDURES SHOULD FURNISH ADEQUATE INFORMATION TO ENSURE THAT A DETERMINATION CAN BE MADE AS TO EQUALITY OF THE PRODUCT(S) OFFERED.

#### B. Samples:

- 1. Clearly labeled samples of all materials to be used on the job should be submitted to the Architect for approval before work starts.
- 2. The approved samples will become the standard materials used on the job. Substitutions will not be permitted without written approval from the Architect.

#### C. Quality Control Submittals:

1. Submit a written program for each phase of process including protection of surrounding materials during operations. Describe in detail materials, methods, and equipment to be used for each phase of work.
2. If alternative methods and materials to those indicated are proposed for any phase of work, provide written description to Architect, including evidence of successful use on other, comparable projects, and program testing to demonstrate effectiveness for use on this project.
3. The contractor should supply proof of work on this type of project submitting a list of pertinent projects the subcontractor has worked on which includes the scope of work, the budget for the scope of work, and a way to contact the Owner and Architect of each project.

D. Design Data/Test Reports/Certificates:

1. Routine testing of proposed materials, and of final work for compliance with the procedure will be carried out by the Contractor/Sub-Contractor or his/her appointed representative.
  - a. Cleaning methods should be tested prior to selecting the one for use. The simplest and least aggressive method(s) should be selected.
  - b. The level of cleanliness desired also should be determined. A like-new appearance is both inappropriate and requires an overly harsh cleaning method.
  - c. If test results show that performance criteria are not met, removal and repair of rejected work should be performed.

1.4 QUALITY ASSURANCE

A. Qualifications.

1. Restoration Specialist: Work must be performed by a firm having several years of successful experience in comparable projects and employing personnel skilled in the process and operations indicated. Project supervisor must have several years' experience in work similar to this procedure. Additional personnel must also have experience.
2. A supervisory craftsperson will be present when a craftsperson begins to perform the work in order to explain any procedures. Any modification of the written procedures will be made at that time.
3. The supervisory craftsperson shall also be present during the work to instruct personnel as required.
  - a. Source of Materials: Obtain materials from a single source for each type materials required.

B. Regulatory Requirements

1. The required research report and manufacturer's data shall be at the site and used for reference.
  2. Conform with all applicable safety guidelines.
  3. For Cleaning: Comply with municipal and Federal regulations governing cleaning, chemical waste disposal, scaffolding and protection of adjacent surfaces.
- C. Mock-Ups: After acceptance of the list of materials and proposed method of cleaning, repair or refinishing, a representative sample area shall be cleaned or refinished as specified including the existing logs and daubing. The technical sections of this Project Manual identify specific numbers and size of mock-ups for Architect's and Owner's consideration as the Architect may direct. Mock-ups and test areas shall be provided for all distinct materials that are part of the Work.
1. Employ the method proposed and accepted for use. Obtain acceptance of the sample area from the Architect before proceeding with remainder of the procedure.
  2. Maintain the sample area in its accepted condition until final acceptance of the completed work. Sample work should be performed in an area approved by the conservator and Architect.
  3. A SMALLER TEST FOR EACH PRODUCT SHOULD BE DONE ON EACH MATERIAL IN AN INCONSPICUOUS AREA TO CHECK FOR ADVERSE EFFECTS AND DAMAGE TO THE MATERIAL.
- D. For Cleaning.
1. Before cleaning, all drains to be used should be tested to ensure they are functioning properly. Any clogged drains should be reported immediately.
  2. During cleaning, prevent cleaning residue from entering the drains or drain lines. Drains or drain lines that become blocked with cleaner residue must be cleaned immediately.

## 1.5 DELIVERY, STORAGE AND HANDLING

- A. Packing and Shipping: Deliver materials to site in manufacturer's original and unopened containers and packaging, bearing labels as to type and names of products and manufacturers.
- B. Acceptance at Site: Handle materials in accordance with project safety guidelines and manufacturer's recommendations.
- C. Storage and Protection:

1. Every effort must be made to use and reuse materials that are original to the structure. When removed from their rightful place, these materials must be stored under cover inside the building where they cannot be damaged.
2. If salvage materials are to be used, treat it as new or original materials with regard to storage.
3. Protect all materials during storage and construction from wetting by rain, snow or ground water, and form intermixture with earth or other types of materials.
4. Protect materials from deterioration by moisture and temperature.

## 1.6 PROJECT SITE/CONDITIONS

### A. Environmental Requirements:

1. Whether work is indoor or outdoor, only perform work on substrates in environmental conditions that are ideal. Substrates shall be in ideal condition to receive preservation, restoration, or repair treatment. Substrates that have a condition, e.g. high moisture content, etc., that may impact the preservation, restoration, or repair, should be pre-treated or otherwise addressed.

### B. Existing Conditions: Check manufacturer's literature for precautions and effects of products and procedures on adjacent building materials, components, and especially vegetation.

## 1.7 DELIVERY, STORAGE AND HANDLING

### A. Do not change sources or brands of materials during the course of the work.

### B. All necessary precautions shall be taken to protect all parts of the building not being cleaned or repaired from effects of the work, including excessive amounts of water that should not be allowed to pond in any area. Also provide protection as required to prevent damage to adjacent property.

### C. Provide protection against the spread of dust, debris, and water at or beyond the work area by suitable enclosures of sheeting and tarpaulins.

### D. Provide masking or covering on adjacent surfaces and permanent equipment. Secure coverings without the use of adhesive type tape or nails. Impervious sheeting which produces condensation should not be use.

### E. Prevent the entry of dust, debris and water into the building interior by sealing all openings.

### F. Provide protection from water damage to building, structure or building contents as required.

- G. Test all drains and other water removal systems to assure that drains and systems are functioning properly prior to performing any cleaning operations. Notify Architect or designated representative immediately of any and all drains or systems that are found to be stopped or blocked. Contractor shall repair drains if so, directed by the Architect or designated representative. Do not begin work of this Section until the drains are in working order.
- H. Provide a method to prevent solids such as stone or mortar residue from entering the drains or drain lines. Contractor shall be responsible for cleaning out drains and drain lines that become blocked or filled by sand or any other solids because of work performed under this Contract.
- I. General Scaffolding required for the execution of this work is to be provided by the General Contractor. The subcontractor is to provide miscellaneous ladders and rolling working platforms as needed.

END OF SECTION 010007



## SECTION 011000 – SUMMARY OF WORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work under separate contracts.
5. Access to site.
6. Coordination with occupants.
7. Work restrictions.
8. Specification and drawing conventions.

B. Related Section:

1. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

#### 1.2 PROJECT INFORMATION

A. Project Identification: Repairs and Improvements to the Jacob Wolf House Historic Site

1. Project Location: 13775 Highway 5, Norfork, Arkansas.

B. Owner: Department of Arkansas Heritage

1. Owner's Representative: Marlon Mowdy, Historic Site Manager

C. Architect: Clements & Associates/Architecture, Inc., 507 Main Street, North Little Rock, Arkansas 72114.

#### 1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of the Project is defined by the Contract Documents and consists of the following:

1. The scope of work to be performed on these historic structures and site within this phase are primarily repairs due to ongoing maintenance.
2. RESTORATION WORK: The contractor is cautioned that this project involves largely Restoration Work and maintaining the building in its present form is of utmost importance. The contractor shall use construction calculated to protect the building. Any damage shall be repaired or replaced to present condition or better at no cost to the Owner. This project involves state funds and carries the resultant obligations and

restrictions. Following the receipt of bids, the construction teams will be reviewed for quality and experience of the team members. The bidding contractors are further cautioned that award of the construction contract is dependent upon the quality of craftsman rather than the lowest price.

3. This project includes the improvements to three historic structures located on the Jacob Wolf Historic Site as well as miscellaneous site improvements pertaining to the removal and installation of new fencing, picnic tables, trash receptacles and the construction of a new pavilion.

#### 1.4 ACCESS TO SITE

- A. General: Contractor shall coordinate use of Project site for construction operations during construction period with the site manager for the site to remain open to the public to the greatest extent possible. Contractor's use of Project site is limited to areas directly adjacent to the work and elsewhere by permission.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  1. Limits: Confine construction operations to the area indicated on the drawings.
  2. Driveways, Parking Areas, Walkways and Entrances: Keep driveways 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, unless authorized.
    - a. Schedule deliveries to minimize use of driveways, parking areas, and entrances by construction operations.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: The existing buildings affected by construction operations shall be kept in a weathertight condition throughout construction period. Repair all damage caused by construction operations.

#### 1.5 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, except as otherwise arranged.
- C. Nonsmoking Site: Smoking is not permitted on the premises.

## 1.6 SPECIFICATION AND DRAWING CONVENTIONS

- A. 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. Imperative mood and streamlined language are generally used in the Specifications.
  - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:
  - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard.
  - 3. Keynoting: Materials and products may be identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000



## SECTION 012100 - ALLOWANCES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
  - 1. Quantity allowances.

#### 1.2 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect 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 Architect'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 Architect from the designated supplier.

#### 1.3 SUBMITTALS

- A. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

#### 1.4 COORDINATION

- A. Coordinate allowance items with other portions of the Work.

#### 1.5 **QUANTITY ALLOWANCES**

- A. Allowance shall include cost to Contractor of specific products and materials specified by Architect under allowance and shall include **taxes**, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and under allowance shall be included as part of the Contract Sum and not part of the allowance.

## 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: Fletching Allowance (Jacob Wolf House):
  - 1. In addition to the Fletching Replacement shown, the Contractor shall include in the Base Bid 250 Linear Feet of Fletching Replacement, in addition to the specific areas indicated to be replaced on the drawings.
- B. Allowance No. 2: Purlin Allowance (Visitor Information Center):
  - 1. The Contractor shall include in the Base bid, the replacement of 320 lineal fee of 1" x 5" rough sawn white oak purlins. All exposed replacement purlins shall receive graying finish, as specified.

END OF SECTION 012100

## SECTION 012500 - SUBSTITUTION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Sections:
  - 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
  - 2. Divisions 02 through 49 Sections for specific requirements and limitations for substitutions.

#### 1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

#### 1.4 SUBMITTALS

- A. Substitution Requests: Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication, or installation cannot be provided, if applicable.
    - 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. Include annotated copy of applicable specification section.

Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Certificates and qualification data, where applicable or requested.
  - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - i. Research reports evidencing compliance with building code in effect for Project.
  - j. Detailed comparison of Contractor'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 date of receipt of purchase order, lack of availability, or delays in delivery.
  - k. Cost information, including a proposal of change, if any, in the Contract Sum.
  - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
  - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within **seven** days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within **15** days of receipt of request, or **seven** days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

## 1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

## 1.6 PROCEDURES

- A. Coordination: Modify or adjust affected work as necessary to integrate work of the approved substitutions.

## PART 2 - PRODUCTS

### 2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than **15** days prior to time required for preparation and review of related submittals.
1. Conditions: Architect will consider Contractor's request for substitution 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:
- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - b. Substitution request is fully documented and properly submitted.
  - c. Requested substitution will not adversely affect Contractor's construction schedule.
  - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
  - e. Requested substitution is compatible with other portions of the Work.
  - f. Requested substitution has been coordinated with other portions of the Work.
  - g. Requested substitution provides specified warranty.
  - h. 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.
- B. Substitutions for Convenience: Architect will consider requests for substitution if received within 15 days after **the Notice to Proceed**. Requests received after that time may be considered or rejected at discretion of Architect.
1. Conditions: Architect will consider Contractor's request for substitution 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:
- a. 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 Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
  - b. Requested substitution does not require extensive revisions to the Contract Documents.
  - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - d. Substitution request is fully documented and properly submitted.
  - e. Requested substitution will not adversely affect Contractor's construction schedule.
  - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
  - g. Requested substitution is compatible with other portions of the Work.
  - h. Requested substitution has been coordinated with other portions of the Work.

- i. Requested substitution provides specified warranty.
- j. 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.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

## SECTION 012900 - PAYMENT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and 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:
  - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 2. Division 01 Section "Submittal Procedures" for administrative requirements governing the preparation and submittal of the submittal schedule.

#### 1.3 DEFINITIONS

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

#### 1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction 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. Submittal schedule.
    - c. Items required to be indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Architect at earliest possible date but no later than **seven** days before the date scheduled for submittal of initial Applications for Payment.
  - 3. Subschedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.

4. Subschedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the Work, provide subschedules showing values correlated with each element.
- B. 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.
1. Identification: Include the following Project identification on the schedule of values:
    - a. Project name and location.
    - b. Name of Architect.
    - c. Architect's project number.
    - d. Contractor's name and address.
    - e. Date of submittal.
  2. Arrange schedule of values consistent with format of **AIA Document G703**.
  3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
    - a. Related Specification Section or Division.
    - b. Description of the Work.
    - c. Change Orders (numbers) that affect value.
  4. 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 multiple line items for principal subcontract amounts in excess of **five** percent of Contract Sum.
  5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
  6. 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 required, include evidence of insurance.
  7. 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.
  8. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
  9. 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.

10. 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 Architect 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. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Application for Payment Forms: Use **AIA Document G702 and AIA Document G703** as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. **Architect** will return incomplete applications without action.
  1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
  1. Provide certificate of insurance, and consent of surety to payment, for stored materials.
  2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  3. Provide summary documentation for stored materials indicating the following:
    - a. Materials previously stored and included in previous Applications for Payment.
    - b. Work completed for this Application utilizing previously stored materials.
    - c. Additional materials stored with this Application.
    - d. Total materials remaining stored, including materials with this Application.
- F. Transmittal: Submit a digital signed and notarized request for each Application for Payment to **Architect** by a method ensuring receipt **within 24 hours**. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit conditional final or full waivers.
  3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
  5. Waiver Forms: Submit waivers of lien on required forms, executed in a manner acceptable to Owner.
- H. 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. Contractor's construction schedule (preliminary if not final).
  4. Products list (preliminary if not final).
  5. Schedule of unit prices.
  6. Submittal schedule (preliminary if not final).
  7. List of Contractor's staff assignments.
  8. List of Contractor's principal consultants.
  9. Copies of building permits.
  10. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  11. Initial progress report.
  12. Report of preconstruction conference.
  13. Certificates of insurance and insurance policies.
  14. Performance and payment bonds.
  15. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: 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.
- J. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Updated final statement, accounting for final changes to the Contract Sum.
3. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
4. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
5. AIA Document G707, "Consent of Surety to Final Payment."
6. Final liquidated damages settlement statement.
7. All required warranties, record documents, and other components as required in Section 017700.

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

#### 1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. General project coordination procedures.
  - 2. Administrative and supervisory personnel.
  - 3. Coordination drawings.
  - 4. Requests for Information (RFIs).
  - 5. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Related Sections:
  - 1. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.3 DEFINITIONS

- A. RFI: Request from Owner, Architect, or Contractor seeking information from each other during construction.

#### 1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
  - 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. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.

- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities 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 Contractor's construction schedule.
  - 2. Preparation of the schedule of values.
  - 3. Installation and removal of temporary facilities and controls.
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - 6. Preinstallation conferences.
  - 7. Project closeout activities.
  - 8. Startup and adjustment of systems.
  - 9. Project closeout activities.

#### 1.5 KEY PERSONNEL

- A. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and email addresses. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
  - 1. Post copies of list in temporary field office. Keep list current at all times.

#### 1.6 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
  - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
  - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
  - 1. Project name.
  - 2. Project number.
  - 3. Date.
  - 4. Name of Contractor.

5. Name of Architect.
  6. RFI number, numbered sequentially.
  7. RFI subject.
  8. Specification Section number and title and related paragraphs, as appropriate.
  9. Drawing number and detail references, as appropriate.
  10. Field dimensions and conditions, as appropriate.
  11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  12. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, and details of affected materials, assemblies, and on attached sketches.
- C. RFI Forms: AIA Document G716 or Software-generated form with substantially the same content as indicated above, acceptable to Architect.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven (7) working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following 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 Architect's actions on submittals.
    - f. Incomplete RFIs or inaccurately prepared RFIs.
  2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
  3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number.
1. Project name.
  2. Name and address of Contractor.
  3. Name and address of Architect.

4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

## 1.7 PROJECT MEETINGS

- A. General: Schedule and conduct bi-monthly meetings and conferences at Project site after significant construction has begun, unless otherwise indicated.
  1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within one week of the meeting.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
  1. Conduct the conference to review responsibilities and personnel assignments.
  2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  3. 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. Lines of communications.
    - f. Procedures for processing field decisions and Change Orders.
    - g. Procedures for RFIs.
    - h. Procedures for testing and inspecting.
    - i. Procedures for processing Applications for Payment.
    - j. Distribution of the Contract Documents.
    - k. Submittal procedures.
    - l. Preparation of record documents.
    - m. Use of the premises.
    - n. Work restrictions.
    - o. Working hours.
    - p. Responsibility for temporary facilities and controls.

- q. Procedures for moisture and mold control.
  - r. Parking availability.
  - s. Office, work, and storage areas.
  - t. Equipment deliveries and priorities.
  - u. First aid.
  - v. Security.
  - w. Progress cleaning.
4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Progress Meetings: Conduct progress meetings at monthly intervals.

- 1. Coordinate dates of meetings with preparation of payment requests.
- 2. Attendees: In addition to representatives of Owner and Architect, each contractor, 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 meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
- 3. 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. Contractor'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 Contractor'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) Progress cleaning.
    - 10) Quality and work standards.
    - 11) Status of correction of deficient items.
    - 12) Field observations.
    - 13) Status of RFIs.
    - 14) Status of proposal requests.
    - 15) Pending changes.
    - 16) Status of Change Orders.
    - 17) Pending claims and disputes.

18) Documentation of information for payment requests.

4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor'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.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

## SECTION 013300 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections:
  - 1. Division 01 Section "Operation and Maintenance Data" for submitting maintenance manuals.
  - 2. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.

#### 1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as action submittals.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as informational submittals.

#### 1.4 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, fabrication, and delivery when establishing dates. Include additional time required for making corrections or modifications to submittals noted by the Architect and additional time for handling and reviewing submittals required by those corrections.
  - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
  - 2. Initial Submittal: Submit concurrently with start-up construction schedule. Include submittals required during the first 60 days of construction. List those submittals

- required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
    - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
  4. Format: Arrange the following information in a tabular format:
    - a. Scheduled date for first submittal.
    - b. Specification Section number and title.
    - c. Submittal category: Action, informational.
    - d. Name of subcontractor.
    - e. Description of the Work covered.
    - f. Scheduled date for Architect's final release or approval.
    - g. Activity or event number.

#### 1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic copies of CAD Drawings of the Contract Drawings will **not** be provided by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. **Architect reserves** the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on **Architect's** 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 7 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. **Architect** will advise Contractor 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 7 days for review of each resubmittal.

4. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow **15** days for review of each submittal. Submittal will be returned to **Architect before** being returned to Contractor.

D. Identification and Information:

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Include the following information for processing and recording action taken:
  - a. Project name.
  - b. Date.
  - c. Name of Architect.
  - d. Name of Construction Manager.
  - e. Name of Contractor.
  - f. Name of subcontractor.
  - g. Name of supplier.
  - h. Name of manufacturer.
  - i. Submittal number or other unique identifier, including revision identifier.
  - j. Number and title of appropriate Specification Section.
  - k. Drawing number and detail references, as appropriate.
  - l. Location(s) where product is to be installed, as appropriate.
  - m. Other necessary identification.

E. Options: Identify options requiring selection by the Architect.

F. Deviations: Identify deviations from the Contract Documents on submittals.

G. Unless additional information is required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

H. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will **return submittals, without review**, received from sources other than Contractor.

1. Transmittal Form: Use **AIA Document G810 or equivalent**.
2. Transmittal Form: Provide locations on form for the following information:
  - a. Project name.
  - b. Date.
  - c. Destination (To:).
  - d. Source (From:).
  - e. Names of subcontractor, manufacturer, and supplier.
  - f. Category and type of submittal.
  - g. Submittal purpose and description.
  - h. Specification Section number and title.
  - i. Indication of full or partial submittal.
  - j. Drawing number and detail references, as appropriate.
  - k. Transmittal number.

- l. Submittal and transmittal distribution record.
  - m. Remarks.
  - n. Signature of transmitter.
- 3. On the Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- I. 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 Architect's action stamp.
- J. Distribution: Furnish final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- K. Use for Construction: Use only final submittals that are marked with approval notation from Architect's action stamp.

## PART 2 - PRODUCTS

### 2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Action Submittals: Submit digital submittals, unless otherwise requested.
  - 2. Informational Submittals: Submit digital submittals, unless otherwise requested.
  - 3. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
  - 4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
  - 5. Test and Inspection Reports Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.

2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts and samples.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams showing factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  5. Submit Product Data before or concurrent with Samples.
  6. Submit Product Data in the following format:
    - a. Digitally submit Product Data, unless otherwise indicated.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
  2. Submit Shop Drawings digitally.
- 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 applicable 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.
  - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
  - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
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 full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect 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 when requested. 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. Architect will retain one Sample sets; remainder will be returned.
    - 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.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information:
  1. Type of product. Include unique identifier for each product.
  2. Manufacturer and product name, and model number if applicable.
  3. Submit product schedule digitally.
- F. Contractor's Construction Schedule: Comply with requirements specified in Division 01.

- G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, email, and telephone number of entities performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
- J. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- K. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- L. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- M. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 01 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate **action**.
- C. Informational Submittals: Architect will review each submittal and will not return it or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- E. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- F. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

## SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

#### 1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service: Water service is available on site and the Owner will pay water service use charges for water used by all entities for construction operations.
- C. Electric Power Service: Electrical service is available on site and the Owner will pay electric power service use charges for electricity used by all entities for construction operations.

#### 1.4 PROJECT CONDITIONS

- A. Contractor shall supply materials and labor to modify or extend temporary utilities.

### PART 2 - PRODUCTS

#### 2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
  - 1. Store combustible materials apart from building.

## 2.2 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. 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 and where approved by Owner.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Provide accessories or means to extend utilities as needed.
  - 1. Arrange with Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: The Contractor shall extend and modify water service and distribution piping in sizes and pressures adequate for construction.
- C. Sanitary Facilities: The Contractor shall provide temporary toilets, wash facilities, and drinking water for use of construction personnel.
- D. Electric Power Service: The Contractor shall provide extend and modify electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
- E. 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.
- F. Telephone Service: Provide cellular or other telephone service for use by all construction personnel.
  - 1. Post a list of important telephone numbers.
    - a. Police and fire departments.
    - b. Ambulance service.
    - c. Contractor's home office.
    - d. Architect'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.

### 3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

- 1. Provide trailer mounted temporary offices, and storage containers located where permitted within 30 feet (9 m) of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
- 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

- 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
- 2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Use designated parking areas for construction personnel.

D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

- 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
- 2. Remove snow and ice as required to minimize accumulations.

E. Project Signs: Provide Project signs as described herewith.

1. Project Identification Sign:

a. One wood backed vinyl sign, 32 square feet, bottom 6 feet above ground with wood framing.

b. Content to include:

- 1. Project Title and name of Owner and logos as indicated on Contract Documents.
- 2. Names and titles of authorities.
- 3. Names and title of Architect
- 4. Names of General Contractor.

- 2. Design sign and structure to withstand 60 miles per hour 100Km per hour wind velocity.

3. Sign Printer: Experienced as a professional sign maker for minimum three years.
4. Finishes, Painting: Adequate to withstand weathering, fading and chipping for duration of construction.
5. Show content, layout, lettering, color, foundation, sizes and grades of members. Architect will provide digital layout.
6. Sign Materials:
  - a. Structure and Framing: New, 2 x 4 framing.
  - b. Sign Surfaces: Vinyl surface signage applied to exterior grade plywood with medium density overlay, minimum  $\frac{3}{4}$  inch thick, standard large sizes to minimum joints. Paint all exposed unfinished lumber.
  - c. Rough Hardware: Galvanized.
  - d. Paint and Primers: Exterior quality, two coats, on all lumber of one color as selected as equal to Sherwin Williams. Paint all exposed lumber.
  - e. Lettering: Exterior quality paint, contrasting colors as selected and as approved.
7. Installation:
  - a. Install project identification sign with 15 days after fixed by Notice to Proceed.
  - b. Erect at location of high public visibility adjacent to main entrance to site where authorized.
  - c. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
  - d. Install sign surfaces plumb and level, with butt joints. Anchor securely.
  - e. Paint exposed surfaces of sign, supports and framing.
8. Maintenance: Maintain signs and supports clean, repair, deterioration and damage.
9. Removal: Remove signs, framing, supports, and foundations at completion of Project and restore the area.

F. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - 1. The site is a historic site and excavations cannot take place without approval.
- B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways.
  - 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
  - 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
  - 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from the project site during the course of the project.
  - 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- C. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- D. 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.
- E. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- F. 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.

### 3.5 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. Exposed Construction Phase: When materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
  - 1. Protect porous materials from water damage.
  - 2. Protect stored and installed material from flowing or standing water.
  - 3. Keep porous and organic materials from coming into prolonged contact with concrete.

### 3.6 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. 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 Contractor. Owner reserves right to take possession of Project identification signs.
  - 2. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace paving, and sidewalks to "as found" condition.
  - 3. At Substantial Completion, remove temporary.

END OF SECTION 015000

## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Installation of the Work.
  - 2. Progress cleaning.
  - 3. Protection of installed construction.
  - 4. Correction of the Work.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, 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. Verify compatibility with and suitability of substrates, including compatibility with existing finishes.
  - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

#### 3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of the Contractor, submit a request for information to Architect according to requirements in Division 01 Section "Project Management and Coordination."

### 3.3 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. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. 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.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
  - 1. Allow for building movement, including thermal expansion and contraction.
  - 2. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

### 3.4 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  2. Do not hold waste materials more than seven days during normal weather or three 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: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- 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.
- 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.
- 3.5 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.
  - 1. Repairing includes refinishing damaged surfaces and touching up with matching materials.
- 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.

END OF SECTION 017300

## SECTION 017700 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
- B. Related Sections:
  - 1. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
  - 2. Divisions 02 through 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

#### 1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
  - 1. 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.
  - 2. Submit specific warranties and similar documents.
  - 3. Prepare and submit Project Record Documents, and similar final record information.
  - 4. Deliver extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  - 5. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 6. Complete final cleaning requirements, including touchup staining.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection

or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for final completion.

#### 1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
  1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
  2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Instruct Owner's personnel in maintenance of products.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
  1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding to the interior.
  2. Organize items applying to each space by major element, including categories for ceiling, individual walls and floors.
  3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Contractor.
    - e. Page number.
  4. Submit list of incomplete items in the following format:
    - a. PDF electronic file.

## 1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect 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.
  - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive **8-1/2-by-11-inch (215-by-280-mm)** paper.
  - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
  - 4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Perform 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: Employ experienced workers or professional cleaners for final cleaning. Clean each surface to a condition expected in an average public historical building final. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of 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. Sod all areas disturbed by construction activities.
  - 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. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  - f. Remove debris and surface dust from limited access spaces, including roofs, attics, and similar spaces.
  - g. Clean transparent materials, including glass in windows. Replace chipped or broken glass and other damaged transparent materials.
  - h. 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.
  - i. Leave Project clean and ready for occupancy.
- C. Construction Waste Disposal: Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls."

END OF SECTION 017700

## SECTION 017839 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and 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.
- B. Related Sections include the following:
  - 1. Division 01 Section "Closeout Procedures" for general closeout procedures.
  - 2. Divisions 02 through 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

#### 1.3 SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit one set of marked-up Record Prints.
- B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one copy of each Product Data submittal.
  - 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.

## PART 2 - PRODUCTS

### 2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of black-line white prints of the Contract Drawings and Shop Drawings.
  - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. The contractor is responsible for accurate "redlines" of field changes and modifications.
    - 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. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Changes made by Change Order or Construction Change Directive.
    - d. Changes made following Architect's written orders.
    - e. Details not on the original Contract Drawings.
    - f. Field records for variable and concealed conditions.
    - g. Record information on the Work that is shown only schematically.
  - 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately.
  - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets.

### 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 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 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. Bind or file miscellaneous records and identify each, ready for continued use and reference.

# 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. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839



## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Demolition and removal of selected building members and assemblies.
  - 2. Patching and repairs.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section "Summary of Work" for use of the building and phasing requirements.
  - 2. Division 1 Section "Cutting and Patching" for cutting and patching procedures for selective demolition operations.
  - 3. Division 1 Section "Construction Facilities and Temporary Controls" for temporary utilities, temporary construction and support facilities, temporary security and protection facilities, and environmental protection measures for selective demolition operations.
  - 4. Division 1 Section "Contract Closeout" for record document requirements.

#### 1.3 DEFINITIONS

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.
- B. Remove and Salvage: Items indicated to be removed and salvaged remain the Owner's property. Remove, clean, and pack or crate items to protect against damage. Identify contents of containers and deliver to Owner's designated storage area.
- C. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.
- D. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Architect, items may be

removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

#### 1.4 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, artifacts, antiques, and other items of interest or value to the Owner that may be encountered during selective demolition remain the Owner's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to the Owner.
  - 1. Coordinate with the Owner's historical advisor, who will establish special procedures for removal and salvage.
  - 2. During the demolition phase, the Owner will have a representative frequent the site to advise the contractor in salvage "special requirements".

#### 1.5 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections, for information only, unless otherwise indicated.
- B. Proposed dust-control measures.
- C. Proposed noise-control measures.
- D. Schedule of selective demolition activities indicating the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
  - 2. Interruption of utility services.
  - 3. Detailed sequence of selective demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.
- E. Record drawings at Project closeout according to Division 1 Section "Contract Closeout."

#### 1.6 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Engage only experienced firm specializing in demolition involving historic preservation to perform lumber selective demolition.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

## 1.7 PROJECT CONDITIONS

- A. Owner assumes no responsibility for actual condition of area of building to be selectively demolished.
  - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- B. Asbestos: There is no known asbestos in the area of the work. If any materials suspected of containing asbestos are encountered, do not disturb the materials. Immediately notify the Architect and the Owner.

## 1.8 SCHEDULING

- A. Arrange selective demolition schedule so that work takes place during normal working hours for the Owner's employees, so that the selective demolition can be monitored for care and artifact protection.

## PART 2 - PRODUCTS (Not Applicable)

### 2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
  - 1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
  - 2. Use materials whose installed performance equals or surpasses that of existing materials.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.

- D. When unanticipated electrical, or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Architect.
- E. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.
- F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

### 3.2 UTILITY SERVICES

- A. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Do not interrupt existing utilities serving occupied adjacent facilities, except when authorized in writing by Owner and authorities having jurisdiction.

### 3.3 PREPARATION

- A. Conduct demolition operations to prevent injury to people and damage to building and facilities to remain. Ensure safe passage of people around selective demolition area.
  - 1. Erect temporary protection, where required by authorities having jurisdiction.
  - 2. Protect walls, ceilings, floors, and other existing finish work that are to remain and are exposed during selective demolition operations.
- E. Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.

### 3.4 POLLUTION CONTROLS

- A. Use temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
- B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before start of selective demolition.

### 3.5 SELECTIVE DEMOLITION

- A. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:
  - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
  - 4. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.

### 3.6 PATCHING AND REPAIRS

- A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.
- B. Patching is specified in Division 1 Section "Cutting and Patching."
- C. Where repairs to existing surfaces are required, cut out 24" lengths (minimum) and replace to produce surfaces suitable for new materials.
- D. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.
  - 1. Closely match texture and finish of existing adjacent surface.
  - 2. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
  - 3. Where patching smooth painted surfaces, extend final paint coat over entire unbroken surface containing the patch after the surface has received primer and second coat. Prepare and paint areas of repair from corner to corner.
  - 4. Inspect and test patched areas to demonstrate integrity of the installation, where feasible.
- F. Patch and repair existing surfaces as necessary to provide an even-plane surface of uniform appearance.

### 3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

### 3.8 CLEANING

- A. Sweep the building broom clean immediately upon the completion of selective demolition operation, as the facility is anticipated to remain open to the public during the construction period.

END OF SECTION 024119

## SECTION 033000 - CAST-IN-PLACE CONCRETE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and 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 specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
  - 1. Stone Pier Foundations.
- B. Related Sections include the following:
  - 1. Division 06, Rough Carpentry for framing and form work.
  - 2. Division 04 Stone Masonry for pier footings.

#### 1.3 SUBMITTALS

- A. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
  - 1. Indicate amounts of mixing water to be withheld for later addition at Project site.
- B. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

- B. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.
- C. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
  - 1. ACI 301, "Specification for Structural Concrete,".
  - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.
  - 2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.

### 2.2 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
  - 1. Plywood, metal, or other approved panel materials.
  - 2. Exterior-grade plywood panels, suitable for concrete forms, complying with "Voluntary Product Standards PS 1-07".
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
- C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4" x 3/4" minimum.

### 2.3 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, **Grade 60 (Grade 420)**, deformed.
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- B. Plain-Steel Wire: ASTM A 82, galvanized.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.

## 2.4 REINFORCEMENT ACCESSORIES

- A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete.

## 2.5 CONCRETE MATERIALS

- A. The color of the concrete is to match the natural color of the concrete already on site.
- B. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
  - 1. Portland Cement: ASTM C 150, Type I/II. Supplement with the following:
    - a. Fly Ash: ASTM C 618, Class C.
- C. Silica Fume: ASTM C 1240, amorphous silica.
- D. Normal-Weight Aggregates: ASTM C 33, coarse aggregate or better, graded. Provide aggregates from a single source.
  - 1. Maximum Coarse-Aggregate Size **1 inch (25 mm)**.
  - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- E. Water: ASTM C 94/C 94M and potable.

## 2.6 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C 260 at all exposed exterior concrete.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
- C. Pigment: ASTM C979, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, free of carbon black, nonfading, and resistant to lime and other alkalis.

## 2.7 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) when dry.
- B. Moisture-Retaining Cover: ASTM C 171, white burlap-polyethylene sheet.
- C. Water: Potable.

## 2.8 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
  - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
  - 1. Fly Ash: 25 percent.
- C. Admixtures: Use admixtures according to manufacturer's written instructions.
  - 1. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions only.

## 2.9 CONCRETE MIXTURES FOR BUILDING ELEMENTS

- A. Slabs on Grade, Pier Footings: Proportion normal-weight concrete mixture as follows:
  - 1. Minimum Compressive Strength: 3000 psi (at 28 days.
  - 2. Slump Limit: 4 inches (100 mm.
  - 3. Air Content: 3 percent at exposed concrete.

## 2.10 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116, and furnish batch ticket information.
  - 1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

## PART 3 - EXECUTION

### 3.1 FORMWORK

- A. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- B. Construct forms tight enough to prevent loss of concrete mortar.
- C. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
  - 1. Do not use rust-stained steel form-facing material.
- D. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- E. Chamfer exterior corners and edges of permanently exposed concrete.
- F. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- G. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

### 3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  - 1. Install vertical anchor rods, accurately located, to elevations required.
  - 2. Set wood column anchor plates at pavilion in place and support with wood bracing prior to installing concrete.

### 3.3 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.

- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

### 3.4 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- C. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
- D. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
  - 1. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
  - 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
  - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- E. Hot-Weather Placement: Comply with ACI 301 and as follows:
  - 1. Maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
  - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

### 3.5 FINISHING SLABS ON GRADE

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.
- C. Trowel and Medium-Broom Finish: Apply a first trowel finish to exterior concrete. While concrete is still plastic, slightly scarify surface with a medium broom.

1. Slope concrete surface to drain.
- D. Broom Finish: Apply a broom finish to exterior concrete walking surfaces.
1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Architect before application.

### 3.6 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
    - a. Water.
    - b. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch (300-mm) lap over adjacent absorptive covers.
  2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

### 3.7 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

END OF SECTION 033000



## SECTION 042000 - UNIT MASONRY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Concrete masonry units. (CMU) at piers of the Visitor Center.
  - 2. Termite Shield Material.
- B. Related Sections:
  - 1. Division 06 Section "Rough Carpentry" for new adjacent skirting installation.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product to be used.

#### 1.4 QUALITY ASSURANCE

- A. Source Limitations for Masonry Units: Obtain masonry units from single source from single manufacturer for each product required.
- B. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- B. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

#### 1.6 PROJECT CONDITIONS

- A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost

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or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.
- B. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

## PART 2 - PRODUCTS

### 2.1 MASONRY UNITS, GENERAL

- A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.

### 2.2 CONCRETE MASONRY UNITS

- A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.
- B. CMUs: ASTM C 90.
  1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 1900 psi.
  2. Density Classification: Normal weight.
  3. Size (Width): Manufactured to dimensions 3/8 inch less than nominal dimensions.
  4. Products:
    - a. 16" x 8" x 8" Regular CMU blocks.
    - b. 16" x 16" x 4" solid cap for CMU piers.

### 2.3 TERMITE SHIELD

- A. 25-gauge aluminum sheet metal pre-finished 1" wider in all directions than the product it covers.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

### 3.2 INSTALLATION, GENERAL

- A. Excavate the existing grade down to solid, level boring.
- B. Lay 16" wide concrete block on new spot footings and align the concrete block piers to align with the existing piers to remain under the floor beams. Install pier cap and termite shield and install shims until floor beam is well supported.

END OF SECTION 042000



## SECTION 044300 - STONE MASONRY

### 1.1 GENERAL

- A. The new stonework is limited to the shown modifications to the cistern adjacent to the Wolf House and the reconstruction of the fireplace on the Wolf Cabin
- B. Submittals: Submit the following:
  - 1. Stone Samples: Samples illustrating, color, grade, finish, and stone required showing the full range of variations expected.
  - 2. Qualification Data: For stone masonry Installer. Include lists of completed projects with names and addresses of architects and owners.
- C. Installer: An experienced installer who has successfully completed stone masonry similar to that indicated for this Project.
- D. Mockups: Before installing stone masonry construct sample panel approximately 3' x 4', to verify selections and to demonstrate aesthetic effects and qualities of materials and execution.
- E. Stain Prevention: Immediately remove mortar and soil to prevent them from staining the face of stone masonry.
- F. Cold-Weather Requirements: Do not build on frozen subgrade or setting beds. Remove and replace stone masonry damaged by frost or freezing conditions. Comply with the following requirements:
  - 1. Cold-Weather Construction: Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F (4 and 49 deg C). Maintain mortar above freezing.
  - 2. Cold-Weather Protection: Cover masonry with insulating blankets or provide enclosure and heat to maintain temperatures above 32 deg F (0 deg C) for 48 hours after construction. Use wind breaks when wind velocity exceeds 15 mi./h (25 km/h).
  - 3. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and above and will remain so until stone masonry has dried out.
- G. Hot-Weather Requirements: Protect stone masonry from excessive evaporation of water from mortar. Do not apply mortar to substrates with temperatures of 100 deg F (38 deg C) and above.

### 1.2 PRODUCTS

- A. Native Limestone Required: There are two distinctly different stone types to be used in this project, as follows:
1. The stones for the cistern improvements are limestone. The new stones are to be shaped limestone of matching colors and are to be shaped and installed to match the north fireplace of the Jacob Wolf House.
  2. The stones for the reconstruction of the fireplace on the Wolf Cabin are to be limestone of a matching color to the existing foundation piers Likewise, the stones are to be installed in a pattern to match the north chimney of the Jacob Wolf House.
  3. Site inspect color, texture and appearance of existing stone at the two described locations and provide match from local sources.
  4. Local quarries are preferred.
- B. Mortar Materials: As follows:
1. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color, white, or a blend to produce mortar color to match the existing south fireplace of the Wolf House.
  2. Masonry Cement: ASTM C 91, Type 1.
  3. Hydrated Lime: ASTM C 207, Type S.
  4. Aggregate: ASTM C 144 and as indicated below:
    - a. White-Mortar Aggregates: Natural, white sand or ground, white stone.
    - b. Match the existing mortar aggregates utilized in the fireplace of the Wolf House.
  5. Water: Potable.
  6. Stainless-Steel Wire: ASTM A 580, Type 304 or 316.
- C. Welded-Wire Lath as reinforcement: ASTM C 933, fabricated into 2-by-12-inch mesh with minimum 0.0625-inch- (1.6-mm-) diameter, galvanized steel wire. (To be used to reinforce mortar joints of the new fireplace and cistern).
- D. Masonry Cleaners: As follows:
1. Job-Mixed Detergent Solution: Solution of 1/2-cup (0.14-L) dry-measure tetrasodium polyphosphate and 1/2-cup (0.14-L) dry-measure laundry detergent dissolved in 1 gal. (4 L) of water.
- E. Stone Fabrication: Fabricate stone in sizes and shapes required to comply with requirements indicated, including details on Drawings.
1. Shape stone for type of masonry (pattern) indicated:

- a. Shaped stones to match shape, texture and sizes of the stones of the north fireplace of the Wolf House.
  - b. Note that two different stone types are used at the two different locations.
  - c. Provide stones with straight edges and 90-degree corners.
- F. Mortar Mixes: Do not use admixtures, unless otherwise indicated. Do not use calcium chloride in mortar or grout.
  - 1. Mortar for Stone Masonry: Comply with ASTM C 270, Proportion Specification, for types of mortar indicated below:
    - a. Set stone with Type N mortar.

### 1.3 EXECUTION

- A. Setting Stone Masonry, General: Execute stone masonry by skilled masons experienced with the kind and form of stone and installation method indicated.
  - 1. Arrange stones for good fit with joint widths within tolerances indicated, and to provide offset between vertical joints.
  - 2. Arrange stones for uniformity of appearance, with color and size variations uniformly dispersed for an evenly blended appearance.
  - 3. Maintain uniform joint widths, except for variations due to stone size variations and minor variations required to maintain bond alignment, if any. Lay walls with joints of the following width.
    - a. Joint Width: 1/2 to 1 inch (6 to 13 mm).
  - 4. Match the stones and mortar thickness to replicate the appearance of the north chimney of the Wolf House.
- B. Construction Tolerances: As follows:
  - 1. Variation from Plumb: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet (6 mm in 3 m) or 1/2 inch in 40 feet (12 mm in 12 m) or more. For external corners, and other conspicuous lines, do not exceed 1/4 inch in 20 feet (6 mm in 6 m) or 1/2 inch in 40 feet (12 mm in 12 m) or more.
  - 2. Variation from Level: For bed joints do not exceed 1/4 inch in 20 feet (6 mm in 6 m) or 1/2 inch in 40 feet (12 mm in 12 m) or more.
- C. In-Progress Cleaning: Clean stone masonry as work progresses. Remove mortar fins and smears before tooling joints.

- D. Final Cleaning: After mortar is thoroughly set and cured, remove large mortar particles with wooden paddles and nonmetallic scrape hoes or chisels and clean stone masonry as follows:
1. Test cleaning methods on mockup; leave one-half of panel uncleaned for comparison purposes.
  2. Protect adjacent stone and nonmasonry surfaces from contact with cleaner.
  3. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing thoroughly with clear water.
  4. Clean stone by bucket and brush hand-cleaning method described in BIA Technical Note No. 20 Revised II.
- E. Waste Disposal as Fill Material: Dispose of clean masonry waste, including unusable stone, waste mortar, and excess or soil-contaminated sand, by removing from site.

END OF SECTION 044300

## SECTION 061000 - ROUGH CARPENTRY

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. This Section includes the following:

1. Interior and exterior construction of items indicated on the drawings to be constructed of rough-sawn full/actual dimension lumber.
2. Construction of items to be constructed of treated lumber as indicated on the drawings.
3. Replacement and installation of framing members.
4. The required usage of square nails in all visible locations.

#### 1.2 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Material certificates for dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected verification for each use and design values approved by the American Lumber Standards Committee's (ALSC) Board of Review.
- C. Product Data for factory fabricated products.

#### 1.3 QUALITY ASSURANCE

- A. Lumber Manufacturer Qualifications: To qualify for approval, a custom lumber manufacturer must demonstrate to Architect's satisfaction, based on evaluation of manufacturer-submitted criteria conforming to ASTM E 699, that it has the experience and capability to satisfactorily produce the custom lumber without delaying the Work.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Keep materials under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels. Provide for air circulation within and around stacks and under temporary coverings.
1. For lumber pressure treated with waterborne chemicals, place spacers between each bundle to provide air circulation.

## PART 2 - PRODUCTS

### 2.1 LUMBER, GENERAL

- A. Lumber Standards: Comply with applicable grading rules of inspection agencies certified by ALSC's Board of Review.
- B. Grade Stamps: Provide lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
- C. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
  - 1. Provide rough sawn unless otherwise indicated.
  - 2. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal (38-mm actual) thickness or less, unless otherwise indicated.

### 2.2 DIMENSION LUMBER FRAMING (WHERE INDICATED)

- A. General: Provide dimension lumber of grades indicated according to the ALSC National Grading Rule (NGR) provisions of the inspection agency indicated.
- B. Maximum Moisture Content: 19 percent
- C. Framing Materials: No. 1 grade and the following specie:
  - 1. Mixed Southern Pine: SPIB.
  - 2. White Pine.NOTE: Use White Oak were indicated on the drawings.
- D. Framing: Provide dimension framing lumber in the maximum length possible.

### 2.3 WOOD PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: APA C2, except that lumber is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPAC31 with inorganic boron (SBX).
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent.

- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat all lumber associated with the underpinning (skirt) framing, Cistern framing, Pavilion framing, and elsewhere indicated.

#### 2.4 FULL DIMENSION LUMBER

- A. Full dimension lumber is required for the framing indicated at the porch joist framing. Dimensions as indicated on the drawings. All visible lumber is to be rough sawn, unless otherwise indicated.
- B. The species shall be white oak and be rough sawn finish.
- C. Maximum Moisture Content: 19 percent.

#### 2.5 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including nailers, blocking, grounds, stripping, and similar members (as indicated or required for a complete work).
- B. Fabricate miscellaneous lumber from dimension lumber of sizes indicated and into shapes shown.
- C. Moisture Content: 19 percent maximum for lumber items not specified to receive wood preservative treatment.
- D. Grade: For dimension lumber sizes, provide No. 2 or Construction grade lumber per ALSC's NGRs of any species.

#### 2.6 TIMBERS – FULL DIMENSION JOISTS AND RAFTERS

- A. Full dimension timbers are required for all framing indicated at the porch joists and rafters.
- B. Species: White Oak and rough sawn, No. 1.
- C. Maximum Moisture Content: 19 percent.

#### 2.7 ROOF FLITCHES

- A. Full dimensions 1" x random width.
- B. Species: White Oak, No. 1.
- C. Finish: Rough sawn; live edge.

- D. Maximum content; 19 percent.

## 2.8 FASTENERS

- A. General: Provide reproduction cut nails of size and type indicated that comply with requirements specified.
  - 1. Wood Framing: Use 16d “common” cut (square) nails.
  - 2. Wood Flitches to Rafters: Use 8d “common” cut (square) nails.
  - 3. 1” Wood Trim: Use 8d “common” cut (square) nails.
  - 4. Shutters: Use 8d “Fire Door Clinch” cut (square) nails.
  - 5. Wood Shake (Top Row Only): Use 6 d “shingle” cut (square) nails.
- B. Power-Drive Fasteners will be permitted only where not visible and specifically approved by the Architect.
- C. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4, 6; with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.

## 2.9 METAL FRAMING ANCHORS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Basis-of-Design Products: Subject to compliance with requirements, provide products indicated on the drawings or comparable products by one of the following:
  - 1. Simpson Strong-Tie Co., Inc.
  - 2. Or approved equal.
- C. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.
- D. Refer to the drawings for types and locations of metal framing anchors. Equal to Simpson Strong Tie.
- E. Custom steel connectors shall be custom fabricated to meet the required configurations illustrated.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Discard units of material with defects that impair quality of rough carpentry and that are too small to use with minimum number of joints or optimum joint arrangement.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted.
- C. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of nailers, blocking, and similar supports to allow attachment of other construction as indicated on the drawing.
- D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  - 1. All visible nail-type anchors shall be reproduction cut nails.
  - 2. "Table 2304.9.1-Fastening Schedule," of the International Building Code, however the nails shall be equivalent reproduction cut nail sizes.
- E. Use galvanized nails at treated wood, however the manufacturer's standard finish shall be provided for reproduction cut nails, unless otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.

### 3.2 NAILERS AND BLOCKING

- A. Install wood nailers and blocking where shown and where required for attaching other work. Form to shapes shown and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated.

END OF SECTION 061000

## SECTION 061324 – LOG MAINTENANCE AND REPAIRS

### PART 1 - GENERAL

#### 1.1 PROJECT SCOPE

- A. Cleaning of all existing structures (exterior), application of a damp proofing, and the preparation/daubing of the Wolf Cabin and elsewhere noted.

#### 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Reference Standard: ICC-400, “Standard on the Design and Construction of Log Structures”.

#### 1.3 SUMMARY

- A. Section includes the cleaning, redaubing of existing log timbers and installation of the specified damp proofing.

#### 1.4 DEFINITIONS

- A. Timbers: This terminology is utilized to describe the main wood structure members installed at the perimeter of the porch and connecting the columns to the building.
- B. Log Column: Vertical wood members, called either "poles" or "posts" in the referenced standards.
- C. Inspection agencies, and the abbreviations used to reference them, include the following:
  - 1. NHLA - National Hardwood Lumber Association.
  - 2. NLGA - National Lumber Grades Authority.

#### 1.5 SUBMITTALS

- A. Product Data: For cleaning and preserving wood products and timber connectors.
  - 1. For cleaning and preserving wood products, include chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material.
  - 2. For timber and log column connectors, include installation instructions.
- B. Mock-Up Samples: Two 24” long (minimum) daubing joints, showing the daubing color; indicating the daubing process and trowel finish.

## 1.6 QUALITY ASSURANCE

- A. Timber Standard: Comply with AITC 108, "Standard for Heavy Timber Construction."
- B. Log Standard: ICC-400: Standard on the Design and Construction of Log Structures.
- C. Installer's Qualifications: The installer shall have seven (7) years' experience in the field of log and timber construction similar in type and quality required for this project.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Schedule delivery of heavy timber and log column construction to avoid extended on-site storage and to avoid delaying the Work.
- B. Store materials under cover and protected from weather and contact with damp or wet surfaces. Provide for air circulation within and around stacks and under temporary coverings.

## PART 2 - PRODUCTS

### 2.1 DAUBING

- A. Daubing Mixture: Two (2) parts lime; Nine (9) parts sand and One (1) part Portland cement. The color is to match the finish appearance of the daubing at the Wolf House.

### 2.2 MORTAR MATERIALS

- A. Portland Cement: ASTM 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Hydrated Lime: ASTM C 207, Type N.
- C. Sand: Washed, fine masonry sand.

### 2.3 PRESERVATIVE TREATMENT AND COATINGS

- A. Following cleaning, treat all wood logs with a borate-based preservative via brushing or spraying in accordance with the manufacturer's recommendations. Provide the following products:
  - 1. "Penetreat" by Sashco.
  - 2. "Bora-Care" by Nisus Corporation.
- B. Coat all wood logs (with the exception of the log porch columns) with a clear coat by spraying in accordance with the manufacturer's recommendations. Provide clear coat equal to:

1. Lifetime Wood Treatment, as manufactured by Valhatla Wood Preservatives, Ltd.
2. "Cascade" by Sashco or approved equal.
  - a. Color: Clear.

### PART 3 - EXECUTION

#### 3.1 DAUBING INSTALLATION

- A. Remove existing daubing on the Wolf Cabin (inside and out) and install new daubing over existing or replaced chinking between all logs.
- B. Install over existing chinking, where original wood chinking/supports are missing. Install batt insulation and galvanized lath.

END OF SECTION 061323

## SECTION 062013 - EXTERIOR FINISH CARPENTRY

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Exterior replacement porch decking and associated members.
  - 2. Lumber, window trim, building skirting, shutter and door construction.
  - 3. Miscellaneous finish carpentry as indicated in the drawings.
- B. Related Sections: Division 06, Section "Rough Carpentry" for substrate construction.

#### 1.2 SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.
- B. Samples: For each type of lumber indicated.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and applicable grading rules of inspection agencies certified by ALSC's Board of Review.

#### 2.2 REPLACEMENT PORCH DECKING

- A. Species: White Oak, No. 1 Grade
  - 1. Maximum Moisture Content: 19 percent.
  - 2. Face Surface: Rough Sawn.
  - 3. Dimensions and profiles shall match existing (Custom milled). Refer to drawings for sizes/dimensions.

#### 2.3 WINDOW TRIM AND BUILDING SKIRTING

- A. Species and Grade: Grade No. 1, White Oak; Rough Sawn.
- B. Full dimension lumber is required for the lumber indicated at the window openings and building skirting, elsewhere indicated.
- C. Maximum Moisture Content: 19 percent.

- D. Refer to the drawings for dimensions and profiles. (Custom Milled).

## 2.4 LUMBER, SHUTTER AND DOOR CONSTRUCTION

- A. Tongue and groove actual dimension boards of White Oak (Custom milled).
- B. Maximum Moisture Content: 19 percent.
- C. Refer to the drawings for dimensions and profiles.

## 2.5 HISTORIC REPLICA FASTENERS

- A. General: Provide fasteners of size and type indicated and as manufactured by Tremont Nail Company or as distributed by House of Antique Hardware, Inc.
- B. Wood framing: Use 16d (3-1/2") square cut nails.
- C. Wood Siding, Trim, Floor, and Porch Decking: Use 8d (2-1/2") square cut nails. Use galvanized at the exterior applications.
- D. Roof Shakes: Use 6d (2") shingle square cut nails.

## 2.6 MISCELLANEOUS MATERIALS

- A. Fasteners for Exterior Finish Carpentry: Provide nails or screws, in sufficient length to penetrate not less than 1-1/2 inches (38 mm) into wood substrate.
- B. Glazing compound shall be equal to "DAP 33".

# PART 3 - EXECUTION

## 3.1 PREPARATION

- A. Clean and prepare lumber to be stained, including both faces and exposed edges. Comply with requirements in Division 09 Section "Staining and Transparent Finish."

## 3.2 INSTALLATION, GENERAL

- A. Install exterior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
  - 1. Scribe and cut exterior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.

### 3.3 EXTERIOR TRIM AND SKIRTING INSTALLATION

- A. Install trim with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches (610 mm) long except where necessary.
  - 1. Use scarf joints for end-to-end joints.
  - 2. Stagger end joints in adjacent and related members.
- B. Fit exterior joints to exclude water. Cope at returns and miter at corners.

END OF SECTION 062013



## SECTION 071900 – MASONRY WATER REPELLENTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes penetrating water-repellent coatings for the following vertical and horizontal surfaces:
  - 1. Brick masonry.
  - 2. Limestone.
  - 3. Sandstone.

#### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Product test reports.
- C. Warranty: Sample of special warranty.

#### 1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer.

#### 1.4 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agree(s) to repair or replace materials that fail to maintain water repellency within ten years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. ProSoco, Lawrence, Kansas.
- B. H & C Clear 23 Sealer.
- C. Or approved equal.

## 2.2 PENETRATING WATER REPELLENTS

- A. Siloxane, Penetrating Water Repellent: Clear, oligomeric alkylalkoxysiloxanes containing 9 percent or more solids; with alcohol, ethanol, mineral spirits, water, or other proprietary solvent carrier; and with 5 lb/gal. (600 g/L) or less of VOCs.

1. Products:

- a. SureKlean Weather Seal, Natural Stone Treatment for stone and brick masonry.
- b. Or approved equal.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Clean substrate of substances that might interfere with penetration or performance of water repellents. Test for moisture content, according to water-repellent manufacturer's written instructions, to ensure that surface is dry enough.
1. Clay Brick Masonry: Clean clay brick masonry per ASTM D 5703.
  2. Limestone.
- B. Test for pH level, according to water-repellent manufacturer's written instructions, to ensure chemical bond to silicate minerals.
- C. Protect adjoining work, including sealant bond surfaces, from spillage or blow-over of water repellent. Cover adjoining and nearby surfaces of aluminum and glass if there is the possibility of water repellent being deposited on surfaces. Cover live plants and grass.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 APPLICATION

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect the substrate before application of water repellent and to instruct Applicator on the product and application method to be used.
- B. Apply a heavy-saturation spray coating of water repellent on surfaces indicated for treatment using low-pressure spray equipment. Comply with manufacturer's written instructions for using airless spraying procedure, unless otherwise indicated.
- C. Apply a second saturation spray coating, repeating first application. Comply with manufacturer's written instructions for limitations on drying time between coats and after rainstorm wetting of surfaces between coats. Consult manufacturer's technical representative if written instructions are not applicable to Project conditions.

### 3.3 CLEANING

- A. Immediately clean water repellent from adjoining surfaces and surfaces soiled or damaged by water-repellent application as work progresses. Repair damage caused by water-repellent application. Comply with manufacturer's written cleaning instructions.

END OF SECTION 071900



## SECTION 073129 - WOOD SHINGLES AND SHAKES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Wood roof shakes for the Jacob Wolf House.
  - 2. Wood Wall Shingles for the gables of the Visitor Center.
- B. Related Sections:
  - 1. Division 06 Section "Rough Carpentry" for rafter and flitches replacement lumber.
  - 2. Division 07 Section "Sheet Metal Flashing and Trim" for flashing materials.

#### 1.3 DEFINITIONS

- A. CSSB: Cedar Shake & Shingle Bureau.
- B. Roofing Terminology: See ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

#### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Verification: For the following products, of sizes indicated, to verify size and material selected.
  - 1. Wood Shakes: Full size.
- C. Qualification Data: For qualified Installer.
- D. Maintenance Data: For wood shakes to include in maintenance manuals.
- E. Warranties: Sample of special warranties.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who is to provide adequate past experience installing wood shake roofing systems in a similar application.
- B. Grading Agency Qualifications: An independent testing and inspecting agency recognized by authorities having jurisdiction as qualified to label wood shakes for compliance with referenced grading rules.
- C. Source Limitations: Obtain wood shakes from single source from single manufacturer.
- D. Fire-Resistance Characteristics: Provide wood shakes and related roofing materials identical to those of assemblies tested for fire resistance per test method below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
  - 1. Exterior Fire-Test Exposure: Class B; UL 790 or ASTM E 108 with ASTM D 2898, for application and roof slopes indicated.
- E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Build mockups for wood shakes including accessories.
    - a. Size: 48 inches (1200 mm) long by 48 inches (1200 mm) wide
  - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
- F. Preinstallation Conference: Conduct conference at Project site.
  - 1. The Mock-up shall be complete and be on site for the preinstallation conference for review and discussion prior to the beginning of the installation of the work.

## 1.6 ROOFING CONTRACTOR QUALIFICATIONS AND REQUIREMENTS

- A. This project scope is the replacement of a twenty-one-year-old wood shake roofing system that has reached the end of its effective life, it is required that the installer have previous experience with the installation of similar systems. It is the intent that the actual installer of the wood shake roofing system provides the information requested. Please assure the information is accurate, as it will be checked.
- B. Provide project references for a minimum of three wood shingle (shingle or shake) installation projects. Provide the following:
  - 1. Name of the Project and its location.
  - 2. Name of the Company/Institution that procured the work.
  - 3. Point of Contact: Person who will be able to answer questions regarding the installation at the reference location.

4. Phone number and email of the contact person.
5. Date of the installation.
6. Size of the project in dollars.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store underlayment rolls on end, on pallets or other raised surfaces. Do not double stack rolls.
  1. Handle, store, and place roofing materials in a manner to avoid significant or permanent damage to roof deck or structural supporting members.
- B. Protect unused underlayment from weather, sunlight, and moisture when left overnight or when roofing work is not in progress.

#### 1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit wood shakes and related work to be performed according to manufacturer's written instructions and warranty requirements.
  1. Install self-adhering sheet underlayment within the range of ambient and substrate temperatures recommended by manufacturer.

#### 1.9 WARRANTY

- A. Special Warranty: CSSB's standard form in which CSSB agrees to repair or replace wood shingles and shakes that fail in materials within specified warranty period. Material failures include manufacturing defects that result in leaks.
  1. Materials-Only Warranty Period: 20 years for shakes, and 20 years for manufactured ridge units, from date of Substantial Completion.
- B. Special Project Warranty: Roofing Installer's Warranty, on warranty form at end of this Section, signed by roofing Installer, covering Work of this Section, in which roofing Installer agrees to repair or replace components of wood shake roofing that fails in materials or workmanship within the following warranty period:
  1. Warranty Period: Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 ROOF SHAKES (JACOB WOLF HOUSE)

- A. Cedar Roof Shakes: Handsplit and resawn western red cedar shakes, fire retardant, split face and sawn back.
  - 1. Grading Standard: CSSB's "Grading Rules for Certi-Split Resawn Cedar Shakes."
  - 2. Grade: Premium, with starter courses of Premium.
  - 3. Length: 24 inches (610 mm), with 15-inch- (380-mm-) long starter course.
  - 4. Thickness: 3/4 inch (19 mm) at butt.
  - 5. Certi-Guard permanent fire-retardant treatment required.
  - 6. Hand split and resawn shakes shall be equal to products manufactured by Watkins Sawmill, Ltd.

### 2.2 WOOD GABLE SHINGLES (VISITOR CENTER GABLES)

- A. Cedar Sidewall Shingles: Machine groomed shingles.
  - 1. Grading Standard: CSSB's "Grading Rules for Certi-Split Resawn Cedar Shakes".
  - 2. Grade: Number 1 Grade, blue Label.
  - 3. Material: Red Cedar (Natural Finish), clear heart-wood.
  - 4. Length: 18", width 8" shingles exposure.
  - 5. Certi-guard permanent fire retardant treatment required.
  - 6. Machine grooved (for a shake texture) and trimmed for parallel edges and perpendicular buttends.
  - 7. Machine grooved wood shingles shall be as manufactured by Watkins Sawmill, Ltd. Or approved equal.

### 2.3 WOOD TREATMENTS

- A. Pressure-Preservative Treatment: Provide pressure treated shakes and wall shingles as per Western Wood Preservations requirements.
- B. Fire Retardation Treatment: Class B for installation over purlins.
- C. Identification: Attach a label to each bundle of wood shingles or shakes; identify manufacturer, references to model-code approval, type of product, grade, dimensions, and approved grading agency.
  - 1. Include chemical treatment, method of application, purpose of treatment, and warranties available.

## 2.4 ACCESSORIES

- A. Roofing Nails: ASTM F 1667, stainless-steel wire nails, sharp pointed, and of sufficient length to penetrate a minimum of **3/4 inch (19 mm)** into flinching.
  - 1. Stainless steel nails shall be minimum of 4d box 1-1/2" (12 gauge, 113" diameter), except the top course at the ridge shall be hand nailed with 6d (2") shingle cut nails.
  - 2. Minimum two (2) nails per shake.

## 2.5 METAL FLASHING AND TRIM

- A. General: Comply with requirements in Division 07 Section "Sheet Metal Flashing and Trim."
  - 1. Sheet Metal: Copper.
  - 2. At ridge and elsewhere required.
- B. Fabricate sheet metal flashing and trim to comply with recommendations that apply to design, dimensions, metal, and other characteristics of the item in SMACNA's "Architectural Sheet Metal Manual."
  - 1. Step Flashings: Fabricate with a head lap of **3 inches (75 mm)** and a minimum extension of **4 inches (100 mm)** both horizontally and vertically (at chimneys only).

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
  - 1. Examine roof flitches to verify that they are sound and in acceptable condition.
  - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored and that provision has been made for flashings and penetrations through wood roofing.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 METAL FLASHING INSTALLATION

- A. General: Install metal flashings and other sheet metal to comply with requirements in Division 07 Section "Sheet Metal Flashing and Trim."

1. Install metal flashings according to the drawings."

### 3.3 ROOF-SHAKE INSTALLATION

- A. General: Install wood-shake roofing according to manufacturer's written instructions and to recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- B. Install double-layer wood-shake starter course along lowest roof edge. Extend starter course **1-1/2 inches (38 mm)** over rafter ends and **1-1/2 inches (38 mm)** over rake edge.
  1. Offset joints of double-layer starter course a minimum of **3 inches**.
- C. Install first course of wood shakes directly over starter course and in continuous straight-line courses across roof deck. Install second and succeeding courses of wood shakes in continuous straight-line courses across roof deck. Extend **1-1/2 inches (38 mm)** over rake edge.
  1. Offset joints between shakes in succeeding courses a minimum of **3 inches**
  2. Space shakes a minimum of **3/8 inch (10 mm)** and a maximum of **5/8 inch (16 mm)** apart.
  3. Fasten each shake with two nails spaced **3/4 to 1 inch (19 to 25 mm)** from edge of shake and **1-1/2 to 2 inches (38 to 50 mm)** above butt line of succeeding course. Drive fasteners flush with top surface of shakes without crushing wood.
  4. Maintain weather exposure of **10 inches (255 mm)** for **24-inch- (610-mm-)** long shakes.
- D. Ridge Shake Termination: Extend shakes on the windy side of the roof as shown on the drawings. Maintain same exposure dimension of units as roof-shake exposure. Lap units at ridges to shed water away from direction of prevailing winds. Alternate overlaps of units and fasten with concealed roofing nails of sufficient length to penetrate flitches.

### 3.4 ROOFING INSTALLER'S WARRANTY

- A. WHEREAS \_\_\_\_\_ (name) of \_\_\_\_\_ (address), herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:
  1. Owner: Arkansas Department of Heritage
  2. Address: 300 West Markham Street, Little Rock, Arkansas
  3. Building Name: Jacob Wolf House.
  4. Address: 13775 Highway 5 South, Norfork, Arkansas
  5. Area of Work: Entire Wood Shake Roof System.
  6. Acceptance Date: \_\_\_\_\_ (Insert Date).
  7. Warranty Period: \_\_\_\_\_ <Insert time>.
  8. Expiration Date: \_\_\_\_\_ <Insert date>.
- B. AND WHEREAS Roofing Installer has contracted to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,
- C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be

made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:

1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:
  - a. Lightning;
  - b. Peak gust wind speed exceeding 115 mph (m/sec);
  - c. Fire;
  - d. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
  - e. Faulty construction of chimneys, skylights, and other edge conditions and penetrations of the work;
  - f. Vapor condensation on bottom of roofing; and
  - g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.
2. When work has been damaged by any of the foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.
4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a work deck, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work

according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this \_\_\_\_\_  
(Day) day of \_\_\_\_\_(Month),\_\_\_\_\_ (Year)>.

- 1. Authorized Signature: \_\_\_\_\_.
- 2. Name: \_\_\_\_\_.
- 3. Title: \_\_\_\_\_.

END OF SECTION 073129

## SECTION 074113 - METAL ROOF PANELS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes the standing seam metal roof panels and accessories.
  - 1. Replace all exposed fasteners on the front porch of the Visitor Center.

#### 1.2 RELATED SECTIONS

- A. Division 06 Section "Rough Carpentry" for the replacement of deteriorated wood purlins material.

#### 1.3 PERFORMANCE REQUIREMENTS

- A. Hydrostatic-Head Resistance: No water penetration when tested according to ASTM E 2140.
- B. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
  - 1. Uplift Rating: UL 90.

#### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation layouts of metal roof panels; details of edge conditions, side-seam and endlap joints, panel profiles, corners, anchorages, trim, flashings, closures, and accessories; and special details. Distinguish between factory- and field-assembled work.
- C. Samples: For each type of exposed finish required.
- D. Coordination Drawings: Roof plans, drawn to scale, based on input from installers of the items involved.
- E. Field quality-control reports.
- F. Maintenance data.
- G. Warranties: Samples of special warranties.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer.

## 1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace metal roof panel assemblies that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal roof panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Finish Warranty Period: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PANEL MATERIALS

- A. The new roof panels on the main roof of the Visitor Center are to match the pattern and color of the existing roof panels on the front porch.
- B. Metallic-Coated Steel Sheet: Restricted flatness steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
  - 1. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, **Class AZ50 coating designation, Grade 40** (Class AZM150 coating designation, Grade 275); structural quality.
  - 2. Surface: Smooth, flat finish.
  - 3. Exposed Coil-Coated Finish:
    - a. 2-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat.
  - 4. Concealed Finish: Manufacturer's standard white or light-colored acrylic or polyester backer finish.
- C. Panels shall be equal to MBCI, Metal Roof System, "PBR Metal Panel (R-Panel)".
  - 1. 24 gauge, 50K SI steel.
  - 2. 36" coverage, 12" rib spacing.
  - 3. 1-1/4" inch rib height.

4. Lap seams; exposed fastening system.

D. Panel Sealants:

1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing; 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.
2. Joint Sealant: ASTM C 920; as recommended in writing by metal roof panel manufacturer.
3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.

## 2.2 MISCELLANEOUS MATERIALS

- A. Panel Fasteners: Pre-finished self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide exposed fasteners with heads matching color of metal roof panels by means of plastic caps or factory-applied coating. Provide EPDM, PVC, or neoprene sealing washers.
- B. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.
- C. The fasteners on the existing porch metal roof are to be replaced within this project scope.

## 2.3 ACCESSORIES

- A. Roof Panel Accessories: Provide components approved by roof panel manufacturer and as required for a complete metal roof panel assembly including trim, ridge closures, clips, flashings, sealants, gaskets, fillers, and similar items. Match material and finish of metal roof panels unless otherwise indicated.

## 2.4 FABRICATION

- A. Fabricate and finish metal roof panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes and as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.
- B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.
- C. Fabricate metal roof panel side laps with factory-installed captive gaskets or separator strips that provide a tight seal and prevent metal-to-metal contact, in a manner that will seal weathertight and minimize noise from movements within panel assembly.

- D. Sheet Metal Accessories: Fabricate flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of item indicated.

## PART 3 - EXECUTION

### 3.1 METAL PANEL INSTALLATION

- A. General: Install metal panels in accordance with manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.
1. The bottom edge is to extend 1-1/2" past the rafter ends.
  2. Shim or otherwise plumb substrates receiving metal panels.
  3. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws.
  4. Install screw fasteners in predrilled holes.
  5. Locate and space fastenings in uniform vertical and horizontal alignment.
  6. Install flashing and trim as metal panel work proceeds.
  7. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
  8. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
  9. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.
- B. Fasteners:
1. Steel Panels: Use stainless steel fasteners for surfaces exposed to the exterior; use galvanized-steel fasteners for surfaces exposed to the interior.
- C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.
- D. Lap-Seam Metal Panels: Fasten metal panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.
1. Lap ribbed or fluted sheets one full rib. Apply panels and associated items true to line for neat and weathertight enclosure.
  2. Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal panels.
  3. Locate and space exposed fasteners in uniform vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of washer.
  4. Install screw fasteners with power tools having controlled torque adjusted to compress washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes.
  5. Flash and seal panels with weather closures at perimeter of all openings.

6. Watertight Installation:

- a. Apply a continuous ribbon of sealant or tape to seal lapped joints of metal panels, using sealant or tape as recommend by manufacturer on side laps of nesting-type panels and elsewhere as needed to make panels watertight.
- b. Provide sealant or tape between panels and protruding equipment, vents, and accessories.
- c. At panel splices, nest panels with minimum **4-inch (102-mm)** end lap, sealed with sealant and fastened together by interlocking clamping plates.

E. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal panel system including trim, flashings, sealants, gaskets, fillers, and similar items. Provide types indicated by metal panel manufacturer; or, if not indicated, provide types recommended in writing by metal panel manufacturer.

F. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible and set units true to line and level. Install work with laps, joints, and seams that are permanently watertight.

1. Install exposed flashing and trim that is without buckling and tool marks, and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and achieve waterproof performance.

G. Gutters: Join sections with riveted and soldered or lapped and sealed joints. Attach gutters to eave with gutter hangers spaced not more than **36 inches (914 mm)** o.c. using manufacturer's standard fasteners. The ends of the gutter are to be transitioned 90 degrees to point away from the building. The ends are to be open.

H. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

### 3.2 ACCESSORY INSTALLATION

A. General: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal roof panel assembly including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
2. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

### 3.3 CLEANING

- A. Remove temporary protective coverings and strippable films, if any, as metal roof panels are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of metal roof panel installation, clean finished surfaces as recommended by metal roof panel manufacturer. Maintain in a clean condition during construction.

END OF SECTION 074113

## SECTION 076200 - SHEET METAL FLASHING AND TRIM

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Manufactured counterflashing.
  - 2. Formed steep-slope roof sheet metal fabrication.
  - 3. Chimney caps.
  - 4. Sheet Metal for termite shields.

#### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show installation layouts of sheet metal flashing and trim, including plans, elevations, and keyed details. Distinguish between shop- and field-assembled work.

#### 1.3 QUALITY ASSURANCE

- A. Copper Sheet Metal Standard: Comply with CDA's "Copper in Architecture Handbook." Conform to dimensions and profiles shown unless more stringent requirements are indicated.

#### 1.4 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration within 10 years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying a strippable, temporary protective film before shipping.
- B. Copper Sheet: ASTM B 370, cold-rolled copper sheet, H00 or H01 temper.
  - 1. Non-Patinated Exposed Finish: Mill. (at Roof areas).

- C. Metallic-Coated Steel Sheet: Restricted flatness steel sheet, metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
  - 1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
  - 2. Color: As selected by Architect from manufacturer's full range.
  - 3. Metallic coated steel sheet to be installed as termite shields only.

## 2.2 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
  - 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
    - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating.
    - b. Blind Fasteners: High-strength stainless-steel rivets suitable for metal being fastened.
  - 2. Fasteners for Copper Sheet: Copper, hardware bronze or Series 300 stainless steel.
- C. Solder:
  - 1. For Copper: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead.
- D. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape **1/2 inch (13 mm)** wide and **1/8 inch (3 mm)** thick.
- E. Elastomeric Sealant: ASTM C 920, elastomeric polymer sealant; low modulus; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

## 2.3 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, geometry, metal thickness, and other characteristics of item indicated. Fabricate items at the shop to greatest extent possible.
  - 1. Obtain field measurements for accurate fit before shop fabrication.

2. Form sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
  3. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces exposed to view.
- B. Sealed Joints: Form nonexpansion but movable joints in metal to accommodate elastomeric sealant.
- C. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than **1 inch (25 mm)** deep, filled with butyl sealant concealed within joints.
- D. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- E. Seams: Fabricate nonmoving seams with flat-lock seams. Tin edges to be seamed, form seams, and solder.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement so that completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
1. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
  2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
  3. Space cleats not more than **12 inches (300 mm)** apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
  4. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
  5. Install sealant tape where indicated.
  6. Torch cutting of sheet metal flashing and trim is not permitted.
- B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by SMACNA.
1. Underlayment: Where installing metal flashing directly on wood substrates, install a course of felt underlayment and cover with a slip sheet or install a course of underlayment.

- C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with sealant concealed within joints.
- D. Fastener Sizes: Use fasteners of sizes that will penetrate wood sheathing not less than 1-1/4 inches (32 mm) for nails and not less than 3/4 inch (19 mm) for wood screws.
- E. Seal joints as shown and as required for watertight construction.
- F. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches (38 mm), except reduce pre-tinning where pre-tinned surface would show in completed Work.
  - 1. Do not use torches for soldering. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
  - 2. Copper Soldering: Tin edges of uncoated copper sheets using solder for copper.

### 3.2 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
- B. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches (100 mm) over base flashing. Lap counterflashing joints a minimum of 4 inches (100 mm) and bed with sealant.
- C. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with [elastomeric] [butyl] sealant and clamp flashing to pipes that penetrate roof.

### 3.3 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder and sealants.
- C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions.

END OF SECTION 076200

## SECTION 079200 - JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Sealant at flashings to wood connections where indicated on the drawings.
- B. Related Sections:
  - 1. Division 09 Section "Painting" for architectural finishes.

#### 1.3 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Qualification Data: For qualified Installer.
- D. Warranties: Sample of special warranties.

#### 1.4 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  - 1. When joint substrates are wet.
  - 2. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - 3. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## 1.5 WARRANTY

- A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

- 1. Warranty Period: Two years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

### 2.2 EXTERIOR FLASHING SEALANTS

- A. Shall be silicon equal to Dow Corning Dowsil #790 Silicon Building Sealant at metal to metal or metal to wood/masonry connections.
- B. Wood to Wood sealant shall be equal to SikaFlex 221.

### 2.3 JOINT SEALANT BACKING

- A. General: Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

### 2.4 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

## JOINT SEALANTS

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- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

## JOINT SEALANTS

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### 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
  - 4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
  - 5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.
    - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

### 3.4 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

### 3.5 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION 079200



## SECTION 085200 - WOOD WINDOWS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes unfinished wood-framed windows.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. General: Provide wood windows capable of complying with performance requirements indicated, based on testing manufacturer's windows that are representative of those specified, and that are of test size required by AAMA/WDMA 101/I.S.2/NAFS.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of wood window indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, attachments to other work, operational clearances, and installation details.
- C. Maintenance data.

#### 1.4 QUALITY ASSURANCE

- A. Installer: A qualified installer, approved by manufacturer to install manufacturer's products.
- B. Glazing Publications: Comply with published recommendations of glass manufacturers and with GANA's "Glazing Manual" unless more stringent requirements are indicated.
- C. Deliver in original packaging and protect from weather.

#### 1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace wood windows that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Failure to meet performance requirements.
    - b. Structural failures including excessive deflection, water leakage, air infiltration, or condensation.

- c. Faulty operation of movable sash and hardware.
  - d. Deterioration of wood, metals, vinyl, other materials, and finishes beyond normal weathering.
  - e. Failure of insulating glass.
2. Warranty Period:
- a. Window: Twenty (20) years from date of Substantial Completion.
  - b. Glazing: Ten (10) years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- 1. Unfinished Wood Windows:
    - a. Sierra Pacific Windows.
    - b. Or approved equal.

### 2.2 MATERIALS

- A. Wood: Vertical grain White Oak lumber; kiln dried to a moisture content of 12 percent at time of fabrication; free of visible finger joints, blue stain, knots, pitch pockets, and surface checks larger than **1/32 inch (0.8 mm)** deep by **2 inches (51 mm)** wide; water-repellent preservative treated.
- 1. Apply water repellent, preservative treatment in accordance with ANSI/WDMA 1. 5.4. Following curing, apply primer both interior and exterior.
  - 2. Non-finger jointed materials required.
  - 3. Frame Depth: 6-7/16", Subsill 1-3/32".

### 2.3 WINDOW

- A. Window Type:
- 1. Single hung.
- B. Window to be equal to Sierra Pacific "Premium Wood Single Hung".
- 1. Window shall have 6-7/16" jamb depth. Verify before ordering.
  - 2. Single hung windows shall have a key lockable sash lock.
  - 3. Window shall be manufactured of White Oak and shall be unfinished (natural wood) inside and out.
  - 4. Window hardware shall have a bright brass finish.
  - 5. Insect screen shall be the manufacturer's standard charcoal fiberglass mesh with a dark prefinished frame.

## 2.4 GLAZING

- A. Glass and Glazing Materials: Factory glazed, insulated with Low-E and a light gray tint.

## 2.5 ACCESSORIES

- A. Dividers (False Muntins): Provide dividers in designs indicated for each sash lite, two per sash, removable from the exposed surfaces of interior lites of the sash.
  - 1. Material: Unfinished wood.
  - 2. Pattern: as indicated on the drawings.
  - 3. Color: Unfinished wood.
  - 4. Width: 7/8".

## 2.6 FABRICATION

- A. Fabricate wood windows that are reglazable without dismantling sash or ventilator framing.
- B. Weather Stripping: Provide full-perimeter weather stripping for each operable sash and ventilator.
- C. Factory machine windows for openings and for hardware that is not surface applied.
- D. Glazing Stops: Provide nailed or snap-on glazing stops coordinated with Division 08 Section "Glazing" and glazing system indicated. Provide glazing stops to match sash and ventilator frames.
- E. Sash Thickness: 1-13/32".
- F. Screens: Provide screens at all windows.

## 2.7 WOOD FINISHES

- A. Unfinished Windows: Provide manufacturer's standard factory-prime coat on exposed exterior and interior wood surfaces.

## 2.8 HARDWARE

- A. Sash Lift: 4" solid brass handle (2 per window).
- B. Keyed Window Sash Lock: Equal to CRL Slimline keyed sash lock (Bright Brass).
- C. Finish of miscellaneous components: Dark Bronze.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing windows, hardware, accessories, and other components.
- B. Install windows level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
- C. Set sill members in bed of sealant or with gaskets, as required, for weathertight construction. Install sealant at all windows perimeters.
- D. Clean exposed surfaces immediately after installing windows. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- E. Clean factory-glazed glass immediately after installing windows. Comply with manufacturer's written recommendations for final cleaning and maintenance. Remove nonpermanent labels, and clean surfaces.
- F. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF SECTION 085200

## SECTION 087100 - DOOR AND SHUTTER HARDWARE

### PART 1 GENERAL

#### 1.1 CONDITIONS

- A. The general conditions, supplementary general conditions, and all contract documents are a part of this division of the specifications and all provisions contained herein. Submission of proposal implies that the bidder is fully familiar with all requirements of said documents.

#### 1.2 SCOPE

- A. The finish hardware supplier shall furnish all necessary items for completion of this project, as specified in paragraph 3.5, hardware sets, or as necessary to complete this building excepting the items specifically excluded.

#### 1.3 QUALITY ASSURANCE

- A. The hardware supplier shall submit typewritten hardware schedules to the owner through the general contractor for approval. Each schedule shall contain the door index listing or opening on the project and the hardware for said opening. Each item of hardware listed is to be clearly identified by manufacturer, manufacturer's number and finish.
- B. The owner retains the authority to approve or reject any schedule based upon his knowledge of the suppliers' experience and capabilities, the general quality of the products submitted and compliance with the specifications.
- C. If requested, the supplier shall provide working samples of any items he proposes to substitute. Samples will be returned to the jobsite for installation.
- D. The hardware supplier shall forward template information to all related trades within ten (10) days after receipt of approved hardware schedules. Template submission shall be made in accordance with the latest standards as published by the door and hardware institute.

#### 1.4 DELIVERY, STORAGE AND HANDLING

- A. All items of hardware shall be clearly marked with door number, key symbol, and heading number to correspond with the approved hardware schedule.

- B. The general contractor will be responsible for providing a dry, clean, locked room of adequate size for storage of hardware.

## 1.5 GUARANTEE

- A. The hardware supplier shall guarantee that all materials furnished under this division will be free from defects and blemishes for a period of one (1) year from date of acceptance. The supplier shall repair or replace at his expense, including labor, when instructed to do so by the architect and/or owner any item of finish hardware which may prove to be defective within said period.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Product numbers listed in the following specifications are taken from the catalogs of manufacturers listed as follows, (approved equal accepted).

Ball and Ball Hardware Reproduction, Exton, Pennsylvania  
Historic House Fitters Company, Inc., New Preston, CT.

### 2.2 FINISH

- A. The finishes are indicated on the schedule.

### 2.3 FASTENERS

- A. Where sex nut bolts are specified in paragraph 3.05, furnish sex bolts sized to the thickness of the door with forged finish to match specified hardware.
- B. Material of fasteners shall be ferrous or non-ferrous matching the product being applied.

## PART 3 - EXECUTION

### 3.1 INSPECTION

- A. Conditions of opening size shall be verified by the general contractor as to door frames being plumb and of correct tolerances to receive door and hardware.

### 3.2 INSTALLATION

- A. The installer shall be competent and have knowledge of hardware.
- B. Mounting heights for all hardware shall be recommended by the door and hardware institute.

### 3.3 ADJUSTING

- A. The general contractor shall be responsible for final adjustments on all items of finish hardware. He shall replace or repair any items of hardware until owner accepts the project as complete.

### 3.4 PROTECTION

- A. The general contractor is responsible for protection of all items of hardware until owner accepts the project as complete.

### 3.5 HARDWARE SETS

- A. The following is a general listing of the minimum hardware requirements. Any item of hardware normally required by good practice, or as to meet state or local codes, shall be furnished even though it may not be specifically mentioned.

#### **Door Hardware Set No. 1 (DHW1)**

2 Hinges per Door	12" heart finial strap hinge (#4012) with plate mounted pintle #4020 as manufactured by Historic House Fitter Company. Antique wax Finish.
1 Lockset	Privacy function Iron Regular Bit Key Rim Lock #X100-050 with #F32-051 round brass knob
Lock and Hasp	Reinstall salvaged Hasp and Lock.

Shutter Hardware Set #1

2 Hinges each Shutter

Custom

6" (L) x 1-1/2" (W) x 1/4" spade strap hinges with 1/2 plate mount pintle #4020 as manufactured by Historic House Fitters; Black power coated finish.

1 Lock

Hook and Eye equal to Historic House Fitters Model 1138-1

Cistern Cover

2 Hinges

6" (L) x 1-1/2" (W) x 1/4" spade strap hinges with 1/2 plate mount pintle #4020 as manufactured by Historic House Fitters; Black power coated finish.

END OF SECTION 087100

## SECTION 099300 - STAINING AND TRANSPARENT FINISHING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes surface preparation, and the application of wood finishes on the following substrates:
  - 1. All new lumber will receive a finish. Refer to drawings for locations and finish type.
  - 2. Prepare all masonry piers and cap flashings at the perimeter of the Visitor Center.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
  - 1. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
  - 2. Manufacturer's Information: Provide manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
- B. Samples: For each finish and for each color required.

#### 1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to that indicated for this Project with a record of successful in-service performance.

- B. Mockups: Apply benchmark samples of each finish system indicated and each color selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Architect will select one surface to represent surfaces and conditions for application of each type of finish system and substrate.
    - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
    - b. Other Items: Architect will designate items or areas required.
  - 2. Final approval of stain color selections will be based on benchmark samples.
    - a. If preliminary stain color selections are not approved, apply additional benchmark samples of additional stain colors selected by Architect at no added cost to Owner.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
  - 1. Product name or title of material.
  - 2. Product description (generic classification or binder type).
  - 3. Manufacturer's stock number and date of manufacture.
  - 4. Contents by volume, for pigment and vehicle constituents.
  - 5. Thinning instructions.
  - 6. Application instructions.
  - 7. Color name and number.
  - 8. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.
  - 1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

#### 1.6 PROJECT CONDITIONS

- A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 and 90 deg F (10 and 32 deg C).

- B. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.
  - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

## 1.7 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied in the quantities described below. Package paint materials in unopened, factory-sealed containers for storage and identify with labels describing contents. Deliver extra materials to the Owner.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products listed in the paint schedules.
- B. Manufacturers Names: The following manufacturers are referred to in the paint schedules by use of shortened versions of their names, which are shown in parentheses:
  - 1. Sherwin Williams (SW)
  - 2. Valhalla Wood Preservatives Ltd., as manufactured by Sherwin Williams
  - 3. Or approved Equal
- A. Stain Colors: As selected by Architect from manufacturer's full range.

### 2.2 STAINS, GENERAL

- A. Material Quality: Provide manufacturer's best-quality stain material of the various coating types specified. Stain-material containers not displaying manufacturer's product identification will not be acceptable.

1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed substitutions.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.
  1. Maximum Moisture Content of Wood Substrates: 15 percent when measured with an electronic moisture meter.
  2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes.
  3. Begin finish application only after unsatisfactory conditions have been corrected and surfaces are dry.
  4. Beginning application of finish system constitutes Contractor's acceptance of substrate and conditions.

### 3.2 PREPARATION

- A. Cleaning: Before applying stain or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings.
- B. Surface Preparation: Clean and prepare surfaces to be stained according to manufacturer's written instructions for each particular substrate condition and as specified.
  1. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
  2. At completion of construction activities of other trades, touch up and restore damaged or defaced finished wood surfaces.
- C. Materials Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
  1. Maintain containers used in mixing and applying stain in a clean condition, free of foreign materials and residue.

2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
3. Use only thinners approved by stain manufacturer and only within recommended limits.

### 3.3 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
  1. Stain colors, surface treatments, and finishes are indicated in the drawings.
  2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
- B. Application Procedures: Apply stains and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
  1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted.
- C. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

### 3.4 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded stain materials from the site

### 3.5 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage by staining. Correct damage by cleaning, repairing or replacing, and refinishing, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly stained finishes. Remove temporary protective wrappings provided by others to protect their work after completing staining operations.

1. At completion of construction activities of other trades, touch up and restore damaged or defaced stained surfaces. Comply with procedures specified in PDCA P1.

### 3.6 EXTERIOR WOOD-FINISH-SYSTEM SCHEDULE

#### A. Exterior Graying Finish:

1. One coat: Valhalla Wood Preservatives, LifeTime Wood Treatment

### 3.7 INTERIOR WOOD-FINISH SYSTEM SCHEDULE

#### A. Interior Stain (match existing):

1. One (1) Coat Sherwin Williams SuperDeck Exterior Transparent Wood Stain-250

### 3.8 EXTERIOR CONCRETE BLOCK (PIERS AT VISITOR CENTER)

1. One (1) Coat Block Filler: Conflex Block Filler (SW).
2. One (1) Coat Primer: All surface enamel latex Primer (SW).
3. Two (2) Coats Finish Coat: Emerald Exterior Acrylic Latex Paint (SW).

END OF SECTION 099300



