

Harbor

PROJECT MANUAL AND SPECIFICATIONS

CLOSURE OF C&H HOG
FARM WASTE STORAGE
PONDS



AFIN: 51-00164

Prepared for:

Arkansas Energy & Environment
Division of Environmental Quality
Office of Water Quality
Permits Branch
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

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OCTOBER 2019



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HARBOR PROJECT NO. ADEQ-19436

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INVITATION TO BID
Section 00 11 16 / Rev: April 2019

Harbor Environmental, Inc.
5800 Evergreen Drive
Little Rock, Arkansas 72205
(501) 663-8800

Closure of C&H Hog Farm Waste Storage Ponds
DBA Project #: 9302001
Owner/Agency: Arkansas Department of
Environmental Quality

- 1) You are invited to bid on a General Contract for the:
Construction of: Closure of C&H Hog Farm Waste Storage Ponds
Located At: HC 41, Mount Judea, Arkansas 72683
Project Owner: Arkansas Department of Environmental Quality
Bid Type: Lump Sum Basis: Lowest Responsive and Responsible Bidder

- 2) There will be a Pre-Bid Conference
Date: To Be Determined
Time: 10:00 a.m.
Location: C&H Hog Farm, HC 41, Mount Judea, Arkansas 72683

The State reserves the right to schedule future meetings.

- 3) The Owner will receive bids until:
Date: To Be Determined
Time: 3:30 p.m.
Location: Division of Building Authority, Suite 101N, 501 Woodlane Avenue, Little Rock,
Arkansas 72201

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:

Harbor Environmental by emailing a request to shethcox@harborenv.com. In the email, provide company name, contact name, contact email, contact phone number, company address, and whether digital or hard copy format is desired. Electronic copies of the documents will be provided at no cost; Harbor will provide a digital download link via email. A complete set of contract documents may be obtained from Harbor Environmental, Inc. by depositing a check in the amount of \$100.00 per set, payable to Harbor Environmental, Inc. After receiving the deposit, please allow 2 business days to receive by mail, or 1 business day for in-person pickup at Harbor Environmental, Inc., 5800 Evergreen Drive, Little Rock, Arkansas 72205, (501) 663-8800.

- 5) Bid document deposit and refund information:
Deposits will be refunded to contractors who return the documents in good condition within 10 days after the opening of bids. If the bid documents are obtained otherwise, the bidder may not receive updates and addenda from Harbor, thereby risking bid rejection. Documents can be examined at no cost in hard copy at Harbor, 5800 Evergreen Drive, Little Rock, AR 72205.

- 6) While contract documents can be examined at the following plan room(s), bidders should use caution in doing so:
Harbor Environmental, Inc., 5800 Evergreen Drive, Little Rock, AR 72205, Phone Number (501) 663-8800

- 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>

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 2019

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 bond, 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 at the end of division zero.

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.

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 2019

Bid Date: To Be Determined
Bid Time: 3:30 p.m.
Bid Opening Location: Division of Building Authority,
Suite 101N, 501 Woodlane
Avenue, Little Rock, Arkansas
72201

Bid To: Arkansas Department of Environmental Quality

Bid From: _____

DBA Project Number: 9302001

Project Name: Closure of C&H Hog Farm Waste Storage Ponds

- 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:
Not Required
- 3) Unit Prices: Required If the required quantities of the items listed are increased or decreased by change order, the unit prices set forth shall apply to such quantities. Dollar amount is to be shown numerically. See Attachment A for Unit Prices.
- 4) Trench Safety: Required Ark. Code Ann. §22-9-212 requires the contractor to indicate on this bid form the cost of trenching safety systems. **FAILURE TO SHOW THIS COST WILL INVALIDATE THE BID.** This cost shall be included in the above base bid price.

\$ _____

Dollar Amount Is To Be Shown Numerically

- 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: 90
On or Before Date: NA

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

- 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: \$500 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.
 - 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.
 - 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
 - b. Attachment A Unit Prices

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

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

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

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: _____
Not Required

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.

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

Bid Form Signature Page

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 2019

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 _____ Arkansas Department of Environmental Quality _____, 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: 9302001
Closure of C&H Hog Farm Waste Storage Ponds

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.**

ANTI-BOYCOTT OF ISRAEL CERTIFICATION

ACT 710 of 2017

Section 00 45 00 / REV: April 2019

DBA Project Number: 9302001

Project Name: Closure of C&H Hog Farm Waste Storage Ponds

I hereby certify that pursuant to Arkansas Code Annotated §25-1-501 et seq., neither I or the company named below are currently engaged in any boycott(s) of Israel. Additionally, I and the company named below agree to not engage in any boycotting of Israel activities for the duration of this construction contract.

I represent that I have the authority to legally bind and to complete this certification on behalf of myself and the company named below.

Print Name of Company

Signature and Title

Print Name and Date

AGREEMENT FORM
Section 00 52 13 / Rev: April 2019

THIS AGREEMENT entered into this _____ by and between _____ hereinafter referred to as the Contractor, and Arkansas Department of Environmental Quality hereinafter referred to as the Owner, and the Department of Finance and Administration, 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 Newton County, designated as

Project # : 9302001

Project Name: Closure of C&H Hog Farm Waste Storage Ponds 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, on: To Be Determined

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: 90 Calendar Days

On or Before: NA

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 damages that 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.

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

Arkansas Department of Environmental Quality

Owner: _____ Agency Name

Signature of Authorized Officer of the Agency _____ Date

Print Name Title Email Address

5301 Northshore Drive North Little Rock, Arkansas 72118

Street Address City State Zip Code

Approved: Department of Finance and Administration, Division of Building Authority

By: _____ Date: _____

PERFORMANCE AND PAYMENT BOND
Section 00 61 13 / Rev: April 2019

1) We _____, (Principal), and

_____, (Surety), are held and firmly bound, jointly

and severally, unto _____ Arkansas Department of Environmental Quality _____, 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:

Closure of C&H Hog Farm Waste Storage Ponds

Project # 9302001. 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

Fax Number

CERTIFICATE OF SUBSTANTIAL COMPLETION

Section 00 65 16 / Rev: April 2019

Project Name: Closure of C&H Hog Farm Waste Storage Ponds

DBA Project Number: 9302001 Owner/Agency: Arkansas Department of Environmental Quality

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: Harbor Environmental, Inc.

Address: 5800 Evergreen Drive
Little Rock, Arkansas 72205

Signature Title Date

Approval of Contractor:

Company Name: _____

Address: _____

Signature Title Date

Approval of Owner-Agency:

Agency Name: Arkansas Department of Environmental Quality

Address: 5301 Northshore Drive
North Little Rock, Arkansas 72118

Signature Title Date

Approval of Department of Finance and Administration, Division of Building Authority:

Signature Title Date

Cc: Surety Company

Section 00 65 19 / Certificate of Final Completion – Capital Improvement Project

DBA Project Number: 9302001

Project Name: Closure of C&H Hog Farm Waste Storage Ponds

We, the undersigned parties, state:

- 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:

Contractor Company/Corporation Name

By: Contractor Authorized Representative

Print Name Date

State Agency, Board & Commission:
Arkansas Department of Environmental
Quality

Owner/Agency Name

By: Agency Authorized Representative

Print Name Date

Design Professional:

Harbor Environmental, Inc.
Design Professional Firm Name

By: Design Professional Authorized Representative

Print Name Date

Division of Building Authority

By: DBA Observer or Authorized Representative

Print Name Date

Release of Claims
Section 00 65 19.13 / Rev: April 2019

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 # : 9302001

which was executed on: _____, on the following project:
Closure of C&H Hog Farm Waste Storage Ponds

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: _____.

Consent of Surety
Section 00 65 19.19 / Rev: April 2019

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

1. My name is _____ and I am an authorized representative of _____ a surety company.

2. With regards to the Project Closure of C&H Hog Farm Waste Storage Ponds

DBA Project # 9302001 ; Contract Date _____

Contractor, and the Project Owner

Arkansas Department of Environmental Quality _____ ; I hereby approve the final payment to the Contractor. I agree that the final payment to the Contractor shall not relieve the Surety Company of any of its obligation as set forth in the contract with the State of Arkansas and this Contractor.

AFFIANT 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 2019**

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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; 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.	
TOTAL COST		
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 fixing 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 contact. 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 uninterrupted 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 2019

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	Statutory
b. Applicable Federal	Statutory
c. Employers' Liability	Per Accident: <u>\$100,000</u>
	Disease, Policy Limit: <u>\$500,000</u>
	Disease, Each Employee: <u>\$100,000</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>\$2,000,000</u>
	Aggregate: <u>\$5,000,000</u>

7) Subparagraph 11.1.7, add the following clause:

11.1.7.1 Builder's Risk or Installation Floater Policy:

	N/A
--	-----

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

Wage Rate Requirements
Section 00 73 43 / Rev: April 2019

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

N/A

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

Is This For:

Goods? Services? Both?

Taxpayer ID Name:

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 <small>(senator, representative, name of board/ commission, data entry, etc.)</small>	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.)	
	Current	Former		From MM/YY	To MM/YY	Person's Name(s)	Relation
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 <small>(senator, representative, name of board/ commission, data entry, etc.)</small>	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?		
	Current	Former		From MM/YY	To MM/YY	Person's Name(s)	Ownership Interest (%)	Position of Control
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
930 - 2001	Arkansas Department of Environmental Quality	Colby Ungerank	(501) 682-0047	9302001

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

BIDDING ADDENDA
Section 00 91 13 / Rev: April 2019

Date:

Addendum Number:

Project Number: 9302001

Agency Name: Arkansas Department of Environmental Quality

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

1 INVITATION TO BID

2 SPECIFICATIONS

3 DRAWINGS

**SECTION 010010
INDEX OF PLANS**

PART 1 – GENERAL

The Bid Set Plans bearing the general title of Closure of C&H Hog Farm Waste Storage Ponds and dated October 20, 2019, are included with, and form a part of, the Contract Documents for this Project.

SHEET NO.	DESCRIPTION
C0	COVER SHEET
C1	SITE PLAN
C2	EXISTING SITE CONDITIONS
C3	GRADING PLAN AND PROFILES EROSION
C4	EROSION CONTROL DETAILS
C5	EROSION CONTROL PLAN

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

010100 SUMMARY OF WORK

PART I – GENERAL

1.01 REQUIREMENTS INCLUDED

The Work to be performed under this Contract shall consist of furnishing all tools, equipment, materials, supplies, and furnishing all transportation and services, including fuel, power, water, and essential communications, and performance of all labor, work or other operations required for the fulfillment of the Contract in strict accordance with the specifications, schedules, drawings, and other Contract Documents as herein defined, all which are made a part hereof, and including such detail sketches as may be furnished by the ENGINEER from time to time during construction in clarification of said Contract Documents. The Work shall be completed and all work, materials, and services not expressly shown or called for in Contract Documents which may be necessary for the complete and proper construction of the work in good faith shall be performed, furnished, and installed by the CONTRACTOR as though originally so specified or shown, at no increase in cost to the OWNER.

CONTRACTOR shall not commence construction until authorized by the ENGINEER and/or OWNER.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

The Closure of C&H Hog Farm Waste Storage Ponds project includes the following, with necessary materials, equipment, labor, etc., for construction as shown on the drawings.

1. Dewatering of liquid waste within the ponds (as required);
2. Transport and disposal of liquid waste;
3. Removal of solids from the ponds;
4. Transport and disposal of solids;
5. Removal 6" of soil from bottom and inside levee of pond;
6. Transport and disposal of soil;
7. Clearing and grubbing (as required);
8. Site grading;
9. Site restoration.

1.03 CONTRACT METHOD

The work hereunder will be constructed under a UNIT PRICE contract, itemized as set forth in the Bid Schedule and defined in Section 010250 - Measurement and Payment.

The CONTRACTOR shall include the General Conditions and Supplemental Conditions of the Contract as part of all Subcontract Agreements.

1.04 JURISDICTION

Agencies having jurisdiction over construction of this project include but are not limited to:

- Arkansas Energy and Environment, Division of Environmental Quality
- Newton County

The CONTRACTOR shall secure any permits associated with construction as required by the agency(s) having jurisdiction, shall abide by all rules and regulations of each and shall pay all costs in

connection with the permits. The CONTRACTOR shall pay for such permits and inspection fees to ensure compliance with their requirements.

1.05 COORDINATION

It shall be the responsibility of the CONTRACTOR to coordinate his operations and those of his subcontractors in such a manner so as to avoid interference or delays and ensure the orderly progress of work in the areas of common or interdependent construction activities. The limits of the Contract are indicated on the Plans and specified herein. However, these limits may be altered by mutual agreement of the CONTRACTOR with the OWNER, with the written Agreement of the ENGINEER, in order to facilitate the Work operations.

The Work of this Contract may involve coordination with other utility companies or agencies, either performing connection repair or maintenance service on their own facilities. The CONTRACTOR shall coordinate and cooperate with all utility companies and other contractors working in the same area that this Contract entails. This shall include, but not be limited to, the telephone company; the electric power company; the cable television company; the gas company; highway contractors; all subcontractors; and any other contractors who are performing work within the area of this Contract.

This effort to coordinate and cooperate with all utility companies and other CONTRACTORS shall be toward, but not be limited to, maintaining public access to the various cross streets, residences, commercial establishments, and other institutions within the limits of construction and adjoining streets, and maintaining the area's electric, telephone, cable television, gas, water, and sewer services.

1.06 REFERENCE STANDARDS

Reference to the standards of any technical society, organization, or association or to codes of local or state authorities shall mean the latest effective standard, code, specification, or standard adopted and published at the date of receipt of bids, unless specifically stated otherwise.

1.07 AVAILABILITY OF LAND

Nothing in this Contract shall imply that the CONTRACTOR has exclusive use of roadways or public and/or private land employed to perform the Work.

1.08 CONTRACTOR'S USE OF PREMISES

The CONTRACTOR shall maintain his construction operations within the property limits and areas designated by the OWNER. In the event that the CONTRACTOR deems it necessary or advisable to operate beyond the limits as provided by the OWNER, he shall be responsible for coordinating such efforts with the OWNER.

1.10 SALVAGE OF MATERIAL AND EQUIPMENT

No items shall be salvaged and reused without permission from the OWNER or the ENGINEER unless specifically stated otherwise in the bid form.

The OWNER reserves the right of first refusal to salvage any item. If so directed by the ENGINEER, the CONTRACTOR shall deliver to a location any items to be salvaged by the OWNER.

1.11 STORAGE OF MATERIALS

Storage conditions shall be acceptable to the OWNER for all materials and equipment not incorporated into the Work but included in applications for payment. Such storage arrangements and conditions shall be presented in writing and shall afford adequate and satisfactory security and protection. Off-site storage facilities shall be accessible to the ENGINEER. The stored materials shall be insured for full value. Certificates of Insurance coverage must be submitted to the OWNER or ENGINEER with the request for payment by the CONTRACTOR. All arrangements and costs for storage facilities shall be paid by the CONTRACTOR, unless specifically designated in the Contract Documents to be furnished by the OWNER.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 010250

MEASUREMENT AND PAYMENT

PART I – GENERAL

1.01 GENERAL INFORMATION

The CONTRACTOR shall receive and accept the compensation provided in the Proposal and the Agreement as full payment for furnishing certain materials and all labor, tools and equipment, for performing all operations necessary to complete the Work under the Agreement, and also in full payment for all loss or damages arising from the nature of the Work, or from any discrepancy between the actual quantities of Work and quantities herein estimated by the ENGINEER, or 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 OWNER.

It is the intent of these Contract Documents that any cost for which compensation is not directly provided by a bid item shall be prorated and included in the bid item(s) for which they are required. Failure of the CONTRACTOR to follow this procedure shall be basis for rejection of this bid.

The prices stated in the Proposal include all costs and expenses for taxes, labor, equipment, commissions, transportation charges and expenses, patent fees and royalties, together with any and all other costs and expenses for performing and completing the Work as shown on the plans and specified herein. The basis of payment for any item at the unit price shown in the Proposal shall be in accordance with the description of that item in this Section.

All Work shall be in accordance with the Technical Specifications.

Unless specifically listed as a Bid Item, no separate payment will be made for the following items and the cost of such Work shall be included in the applicable contract pay items of Work.

1. Clearing and grubbing;
2. Excavation, including necessary pavement/slab removal;
3. Shoring and sheeting;
4. Removal and disposal of waste liquids, waste solids, and 6" of soil from bottom and inside levee of pond ;
5. Backfill;
6. Grading;
7. Temporary facilities and controls during construction such as water/sanitary facilities, traffic control and environmental protection, unless specifically provided for in a pay item;
8. Removing and disposing of waste material due to construction;
9. Cleanup;
10. Refill materials, except as hereinafter specified;
11. Testing and placing system in operation;
12. Any material or equipment required installed and/or used for the tests;
13. Maintaining the existing quality of service during construction;
14. Color audio-video construction record;
15. Providing the services of an Independent Testing Laboratory for materials and compaction testing.
16. Providing the services of a professional LAND SURVEYOR, licensed in the State of Arkansas, to establish horizontal and vertical control, layout the Work, and assist with the preparation of record drawings;
17. Cost to reproduce drawings, specifications, shop drawings, and reports for the CONTRACTOR's use and for submissions to the OWNER;
18. Temporary fencing;

19. Dust Control;
20. Noise suppression measures;
21. Utility notification and location and exploratory pits if necessary; and
22. All other appurtenant Work as required for a complete and operable system.
23. Damage to owner's property will be repaired within three days.

The CONTRACTOR's attention is again called to the fact that the quotations for the various items of Work are intended to establish a total price for completing the Work in its entirety. Should the CONTRACTOR feel that the cost for any item of Work has not been established by the Proposal or Contract Pay Items, he shall include the cost for that Work in some other applicable bid item, so that his proposal for the project reflects his total price for completing the Work in its entirety.

Following final payment by the OWNER, the CONTRACTOR shall maintain seed and mulch, shrubbery, trees, fences, sod, and other surfaces disturbed for a period of twelve (12) months thereafter. The cost of maintaining the restored areas is considered incidental to the cost of restoring the areas disturbed by the CONTRACTOR. These costs shall be prorated and included in the cost for the bid item which it is required.

1.02 MEASUREMENT

The quantities for payment under this Agreement shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the OWNER, in accordance with the applicable method of measurement therefore contained herein. A representative of the OWNER shall witness all field measurement. Payment shall be made and shall be based on percent complete of the Lump Sum price according to the schedule of values.

1.03 PAYMENT

The CONTRACTOR will be paid monthly, by the OWNER, for Work performed the previous month. Each application for payment shall be submitted with a copy of record drawings, to date, as well as an updated schedule for the project. Payment shall be for the approved and accepted amount of Work that the CONTRACTOR has accomplished in the previous month.

Payment shall be made and shall be based on percent complete for Lump Sum pay items and on a measured quantity, unit price basis for unit price pay items.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.01 Bid Items: Closure of C&H Hog Farm Waste Storage Ponds. Bids Items are unit prices or lump sums as specified on the Bid Form.

END OF SECTION

SECTION 010300 SPECIAL PROJECT PROCEDURES

PART 1 - GENERAL

1.01 WORKMANSHIP, MATERIAL AND EQUIPMENT

- A. When a particular product is specified or called for, it is intended and shall be understood that the proposal tendered by the CONTRACTOR included those products in his bid. Should the CONTRACTOR desire products equal to those specified, the CONTRACTOR shall furnish information as described in the Standard General Conditions. The alternate product or products submitted by the CONTRACTOR shall meet the requirements of the Specifications and shall, in all respects, be equal to the products specified by name herein.
- B. All apparatus, mechanism, equipment, machinery and manufactured articles for incorporation into the Work shall be the new and unused standard products of recognized reputable Manufacturers.
- C. The CONTRACTOR shall maintain the staging area in a tidy manner and shall execute cleaning activities per Section 017100, Cleaning.

1.02 CONTRACTOR PROVIDED STAGING AREA

- A. The CONTRACTOR may use part of the site to stage construction activities such as material storage, parking, or tool & supply storage. The CONTRACTOR shall secure staging area(s) as he may require, and the cost shall be included as part of the price bid for the work.
- B. Appropriate temporary security fencing and effective erosion control measures shall be provided for the staging area(s). In particular, effective measures shall be employed to prevent soil, mud, or dust from being tracked onto roadway surfaces. The cost to provide and maintain temporary security fencing and erosion control measures shall be considered an incidental project cost shall not be separately measured for payment.
- C. The CONTRACTOR shall maintain the staging area in a tidy manner and shall execute cleaning activities per Section 017100, Cleaning.
- D. When the Work of this project is completed, and before final payment is made to the CONTRACTOR, the staging area shall be restored according to the agreement between the CONTRACTOR and the OWNER including removal of temporary fencing and erosion control measures. Roadway damage that may have occurred because of construction equipment operation shall be repaired to the satisfaction of the ENGINEER. The OWNER may withhold payment retainage to the CONTRACTOR until the requirements of this paragraph are satisfied.

1.03 PROVISIONS FOR CONTROL OF EROSION

- A. Sufficient precautions shall be taken during construction to minimize the run-off of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride, or other polluting materials harmful to humans, fish, or other life, into the supplies and surface

waters of the state. Special precautions shall be taken in the use of construction equipment to prevent operations which promote erosion.

- B. Comply with the requirements of the DEQ general permit for stormwater discharges and the stormwater pollution prevention plan developed for the project.

1.04 WARRANTIES

- A. The CONTRACTOR and the materials manufactures shall warranty all workmanship and materials for a minimum period of twelve (12) months. Warranty period shall commence on the date of Final Acceptance by the OWNER.
- B. If, within the warranty period, repairs or changes are required in connection with guaranteed work which, in the opinion of the ENGINEER, is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the CONTRACTOR shall, promptly upon receipt of notice from the OWNER and without expense to the OWNER, do the following:
 - 1. Place in satisfactory condition, in every particular, all of such warranted work and correct all defects herein.
 - 2. Make good all damage which, in the opinion of the ENGINEER, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract.
 - 3. Make good any work or material or site disturbed in fulfilling any such guarantee.
- C. If the CONTRACTOR, after notice, fails within (10) days to proceed to comply with the terms of this warranty, the OWNER may have the defects corrected, and the CONTRACTOR and his surety shall be liable for all expense incurred, provided, however, that in case of an emergency where, in the opinion of the OWNER, delay would cause loss or damage, repairs may be started without notice being given to the CONTRACTOR and the CONTRACTOR shall pay the cost thereof.
- D. All special guarantees or warranties applicable to specific parts of the work, as may be stipulated in the Contract Specifications or other papers forming a part of this Contract, shall be subject to the terms of this paragraph during the first year of life of each such guarantee. All special guarantees and manufacturers' warranties shall be assembled by the CONTRACTOR and delivered to the ENGINEER, along with a summary list thereof, before the acceptance of the Work.
- E. The CONTRACTOR's twelve (12) month warranty or guarantee period shall be part of the project performance bond.

1.05 PUBLIC NUISANCE

- A. The CONTRACTOR shall not create a public nuisance including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.
- B. Trash accumulation, including accumulation of the lunch-break refuse, shall be avoided. The CONTRACTOR shall provide appropriate containers for collecting rubbish and the

CONTRACTOR's superintendent shall enforce their use. The containers shall also be regularly emptied. NO REFUSE SHALL BE BURIED ONSITE.

- C. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

1.06 HAZARDOUS LOCATIONS

- A. CONTRACTOR shall perform work in accordance with OSHA, state and local safety requirements.

1.07 RELOCATIONS

- A. The CONTRACTOR shall be responsible for the relocation of structures, including but not limited to: utility poles, signs, sign poles, fences, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid.

1.08 SUSPENSION OF WORK DUE TO WEATHER

- A. During inclement weather, all work that could be damaged or rendered inferior by such weather conditions shall be suspended. The orders and decisions of the ENGINEER as to suspensions shall be final and binding. The ability to issue such an order shall not be interpreted as a requirement to do so. During suspension of the Work for any cause, the Work shall be suitably covered and protected so as to preserve it from injury by the weather or otherwise; and, if the ENGINEER shall so direct, rubbish and surplus materials shall be removed. Throughout the duration of the Work, the CONTRACTOR shall provide effective erosion control.

1.9 SALVAGE

- A. Any existing equipment or material, including but not limited to, valves, pipes, fittings, couplings, etc., which is removed or replaced as a result of construction under this project may be designated as necessary and delivered, to the OWNER at a location directed by the OWNER, at the CONTRACTOR's expense. Removed material not designed as salvage, or that the ENGINEER decides is not to salvage, shall become the property of the CONTRACTOR, removed from the site, and properly disposed at the CONTRACTOR's expense.

1.10 PERMITS

- A. Upon notice of award, the CONTRACTOR shall immediately apply for all applicable permits not previously obtained by the OWNER to do the work from the appropriate governmental agency or agencies. No Work shall commence until all applicable permits have been obtained and copies delivered to the ENGINEER. The cost for obtaining all permits shall be borne by the CONTRACTOR.
- B. The CONTRACTOR shall be responsible for complying with all permits conditions for any permits that the OWNER has already obtained.

1.11 NOTIFICATION OF WORK ON EXISTING FACILITIES

- A. Before commencing Work on any of the existing structures or equipment, the CONTRACTOR shall notify the OWNER/ENGINEER, in writing, at least 10 calendar days in advance of the date he proposes to commence such Work.
- B. CONTRACTOR shall notify the various permitting and regulatory agencies prior to commencing the Work permitted and regulated by the affected permits in accordance with the conditions of the permit.

1.12 EXISTING UNDERGROUND PIPING, STRUCTURES AND UTILITIES

- A. The attention of the CONTRACTOR is drawn to the fact that during excavation and grading, the possibility exists that the CONTRACTOR will encounter various water, gas, telephone, electrical, service laterals or other utility lines not shown on the Drawings. The CONTRACTOR shall exercise extreme care before and during excavation to locate and flag these lines so as to avoid damage thereto. Should damage occur to an existing line, the CONTRACTOR shall immediately contact the utility and the OWNER. If the repair is to be completed by the CONTRACTOR it shall be carried out in a timely and quality manner. Cost associated with such damage shall be borne by the CONTRACTOR at no additional cost to the OWNER.
- B. It is the responsibility of the CONTRACTOR to ensure that all utility or other poles, the stability of which may be endangered by the close proximity of excavation, are temporarily supported in position while work proceeds in the vicinity of the pole and that utility or other companies concerned be given reasonable advance notice of any such excavation by the CONTRACTOR. All costs are the responsibility of the CONTRACTOR.
- C. The locations of existing utilities are shown without express or implied representation, assurance, or guarantee that they are complete or correct or that they represent a true picture of underground piping to be encountered. Encountering existing utilities at different depth or locations than shown on the drawings shall not be cause for additional cost to the OWNER.
- D. The existing piping and utilities that interfere with new construction shall be rerouted as shown, specified or required. The CONTRACTOR shall excavate sufficiently ahead of the proposed work to predict potential conflicts. Before any piping and utilities not shown on the Drawings are disturbed, the CONTRACTOR shall immediately notify the ENGINEER of the location of the pipeline or utility and shall reroute or relocate the pipeline or utility as directed.
- E. The CONTRACTOR shall exercise care in any excavation to locate all existing piping and utilities. All utilities that do not interfere with completed work shall be carefully protected against damage. Any existing utilities damage in any way by the CONTRACTOR shall be restored or replaced by the CONTRACTOR at his expense, as directed by the ENGINEER.
- F. It is intended that wherever existing utilities such as water, gas, telephone, electrical, or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the Drawings. However, when in the opinion of the OWNER or ENGINEER this procedure is not feasible, the ENGINEER may direct the use of fittings for the utility crossing. The CONTRACTOR shall verify utility crossing with test pits prior to construction as required by the ENGINEER.

1.13 JOB SITE SECURITY

- A. The CONTRACTOR shall properly protect the work area to prevent the public from entering the work area. The CONTRACTOR shall furnish and erect such barricades, fences, light, and danger signals and shall provide such other precautionary measures for the protection of persons or property and of the work as necessary. Barricades/fencing shall be painted or have a reflective color that will be visible at night. From sunset to sunrise, the CONTRACTOR shall furnish and maintain at least one light at each barricade/fence and sufficient numbers of barricades/fencing shall be erected to keep vehicles or pedestrians from entering on or into any work under construction.
- B. The CONTRACTOR will be held responsible for all damage to the work due to failure of barricades, fencing signs, and lights to protect it and whenever evidence is found of such damage, the CONTRACTOR shall immediately remove the damaged portion and replace it at his cost and expense. The CONTRACTOR's responsibility for the maintenance of barricades, signs, and lights shall not cease until the project has been accepted by the OWNER.

1.14 GEOTECHNICAL INVESTIGATION

- A. CONTRACTORS may perform geotechnical investigations at the site if they deem necessary for preparing their bids with proper notification to the OWNER.

1.15 STORMWATER POLLUTION PREVENTION PLAN AND NOTICE OF INTENT

- A. Prior to the start of construction, the CONTRACTOR shall sign the apply for and obtain from DEQ a Construction Stormwater General Permit and prepare the necessary Stormwater Pollution Prevention Plan. The CONTRACTOR shall be responsible for permit fees.

1.16 COOPERATION WITH OTHER CONTRACTORS

- A. The CONTRACTOR is not entitled to exclusive use of the site. The OWNER may perform additional work with its own forces or through another CONTRACTOR within the project area. The CONTRACTOR shall provide the other OWNER contractors, including but not limited to the other CONTRACTOR's employees, agents, subcontractors, and suppliers (or the OWNER's forces performing the additional work), access to the site and shall cooperate with said CONTRACTORS and the OWNER.

1.17 SUSPENSION OF WORK

- A. The ENGINEER can shut down work if deviation from the Contract Documents is observed without prior written approval. Questions, interpretations, or clarifications about the Work must be submitted by the CONTRACTOR through a Request for Information (RFI) document.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 010500 FIELD ENGINEERING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Provide and pay for field engineering service for Project.
 - 1. Survey work required in execution of Work.
 - 2. Civil, structural, or other professional engineering services specified or required to execute CONTRACTOR's construction methods.
 - 3. The method of field staking for the construction of the Work shall be at the option of the CONTRACTOR. The OWNER has provided the engineering survey necessary to establish reference points which in his judgment are necessary to enable the CONTRACTOR to proceed with his Work.
 - 4. The accuracy of any method of staking shall be the responsibility of the CONTRACTOR. All engineering for vertical and horizontal control shall be the responsibility of the CONTRACTOR.
 - 5. The CONTRACTOR shall be held responsible for the preservation of all stakes and marks. If any stakes or marks are carelessly or willfully disturbed by the CONTRACTOR, the CONTRACTOR shall not proceed with any Work until he has established such points, marks, lines, and elevations as may be necessary for the prosecution of the Work.
 - 6. The CONTRACTOR shall retain the services of a registered LAND SURVEYOR licensed in the State of Arkansas to identify existing control points and maintain a survey during construction.
- B. Related Requirements Described Elsewhere:
 - 1. Conditions of the Contract.
 - 2. Summary of Work: Section 01010.

1.02 QUALIFICATIONS OF SURVEYOR OR ENGINEER

- A. Qualified ENGINEER or registered LAND SURVEYOR, acceptable to the OWNER and the ENGINEER.
- B. Registered PROFESSIONAL ENGINEER of the discipline required for the specific service on the Project, currently licensed in the State of Arkansas.

1.03 SURVEY REFERENCE POINTS

- A. Locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction.

1. Make no changes or relocations without prior written notice to the ENGINEER.
2. Report to the ENGINEER when any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.
3. Require surveyor to replace Project control points which may be lost or destroyed at no additional cost to the OWNER. Establish replacement based on original survey control.

1.04 PROJECT SURVEY REQUIREMENTS

- A. Establish a minimum of two (2) permanent benchmarks on site, referenced to data established by survey control points.

Record locations, with horizontal and vertical data, on Project Record Documents.

- B. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means. Site improvements:
- a. Stakes for grading, fill, and topsoil replacement.
 - b. Utility slopes and invert elevations.
- C. From time to time, verify layouts by same methods.

1.05 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses.
- B. At the end of the project, submit a certified site survey at 1 inch equals 30 feet scale on reproducible tracing sheets 24 inches by 36 inches.

1.06 SUBMITTALS

- A. Submit name and address of SURVEYOR to the ENGINEER.
- B. On request of the ENGINEER, submit documentation to verify accuracy of field engineering work.
- C. Submit (3) full-size 24"x36" drawings of the as-built survey, signed and sealed by a Registered Land Surveyor.
- D. Submit (2) CD-ROMs of the as-built survey in AutoCAD 2013 or newer format.
- E. Submit (2) CD-ROMs of the GIS data.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

**SECTION 010600
REGULATORY REQUIREMENTS & PERMITS**

PART I – GENERAL

1.01 REQUIREMENTS

- A. The CONTRACTOR shall comply with all Federal, State, and local building codes, laws and/or ordinances appropriate to the project.
- B. The CONTRACTOR shall comply with these codes, laws, regulations, rules, and directives of all agencies, boards, districts, and governmental bodies having jurisdiction.
- C. The CONTRACTOR shall obtain and pay the cost of all permits and fees associated with the project. The CONTRACTOR shall be reimbursed for fees associated with the Site Prep Permit issued by the OWNER.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. All applicable sections of the Specifications
- B. General Conditions

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION

3.01 MEASUREMENT AND PAYMENT

- A. There shall be no special measurement or payment for the work under this section; it shall be included in the lump sum price bid for Mobilization.

END OF SECTION

SECTION 010610
STORMWATER POLLUTION PREVENTION / NPDES REQUIREMENTS

PART I – GENERAL

1.01 SECTION INCLUDES

- A. Stormwater Pollution Prevention Plan requirements and recommendations under the NPDES program

1.02 PURPOSE

- A. The purpose of this section is to outline minimum requirements for stormwater pollution prevention as required under the NPDES program and administered by DEQ. There may be more stringent local government or OWNER requirements for Erosion and Sediment Control, which would be located in the Specifications or on the Drawings. The more stringent requirement governs.

1.03 RELATED SECTIONS

- A. Section 010600: Regulatory Requirements
- B. Section 015680: Temporary Erosion and Sedimentation Control
- B. Section 022700: Erosion and Sediment Control

1.04 ABBREVIATIONS

- A. NPDES - National Pollution Discharge Elimination System
- B. SWPPP - Stormwater Pollution Prevention Plan
- C. NOI - Notice of Intent
- D. NOT - Notice of Termination

1.05 CONSTRUCTION PROJECTS REQUIRING COMPLIANCE WITH NPDES GENERAL PERMIT

- A. All projects 1 or more acres in size that discharge to offsite areas.

1.06 GENERAL REQUIREMENTS

- A. The CONTRACTOR and all subcontractors involved with a construction activity that disturbs site soil or who implement a pollutant control measure identified herein must comply with the following requirements of the NPDES General Permit and any local governing agency having jurisdiction concerning erosion and sedimentation control.
- B. The CONTRACTOR is responsible for preparing a SWPPP and for completing and submitting the required NOI and NOT forms, and paying all associated fees. The CONTRACTOR shall provide a copy of the SWPPP to the ENGINEER and DEQ for review. NOI and NOT forms, and permit application fee information are available for download the DEQ website.
- C. The SWPPP shall include the elements necessary to comply with the general permit for construction activities administered by the DEQ under authority of the U.S. Environmental Protection Agency (EPA), and shall also include all local governing agency and OWNER requirements. There may be more stringent local government or OWNER requirements for Erosion and Sediment Control, which would be located in the Specifications or on the Drawings.
- D. A copy of the NOI and a description of the project must be posted in a prominent place for public viewing at the construction site.

- E. The SWPPP must be implemented at the start of construction. A complete copy of the SWPPP, including copies of all inspection reports, plan revisions, etc., must be retained at the project site at all times during working hours and kept in the permanent project records for at least three years following submission of the NOT.
- F. The CONTRACTOR must provide names and addresses of all subcontractors working on this project who will be involved with the major construction activities that disturb site soil. That information must be part of the SWPPP.
- G. The CONTRACTOR and all subcontractors involved with the major construction activities that disturb site soil must sign a copy of the appropriate certification statement included herein.
- H. Regular inspections by the CONTRACTOR as required by the permit must be made to determine effectiveness of the SWPPP. The inspector must be a person familiar with the site, the nature of the major construction activities, and qualified to evaluate both overall system performance and individual component performance.
- I. The SWPPP must be updated each time there are significant modifications to the pollutant prevention system or a change of contractors working on the project who disturb site soil. The CONTRACTOR must notify DEQ as soon as these modifications are implemented.
- J. Discharge of oil or other hazardous substances into the storm water is subject to reporting and cleanup requirements. Refer to the permit for additional information. Copies of the General Permit are available for download at the DEQ website.
- K. Once the site reaches final stabilization, the general contractor must complete and submit the NOT to the required NPDES agency and the OWNER.
- L. The SWPPP must be amended as necessary during the course of construction in order to keep it current with the pollutant control measures utilized at the site.
- M. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated must be maintained until the NOT is filed. Copies of these records shall be provided to the OWNER.
- N. The SWPPP must be implemented before construction begins on the site. The primary purpose of the SWPPP is to address the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process. In addition, it shall include recommendations for controlling other sources of pollution that could accompany the major construction activities. The SWPPP will terminate when disturbed areas are stabilized, construction activities are completed, and the NOT has been filed.

1.07 ALLOWABLE NON STORMWATER DISCHARGES DURING CONSTRUCTION

- A. The General Permit for Storm Water Discharges from Construction Activities prohibits most non-storm water discharges during the construction phase. Allowable non-storm water discharges that could occur during construction on this project, which would therefore be covered by the General Permit, include:

1. Discharges from fire fighting activities
2. Fire hydrant flushing
3. Water used to wash vehicles or control dust
4. Water flowing from potable sources and water line flushing
5. Irrigation drainage
6. Routine external building wash down which does not use detergents or other chemicals
7. Runoff from pavement wash-down where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents have not been used
8. Uncontaminated air conditioning compressor condensate
9. Uncontaminated springs, excavation dewatering and groundwater
10. Foundation or footing drains where flows are not contaminated with process materials such as solvents

1.08 MINIMUM SWPPP CONSTRUCTION GUIDELINES

- A. Construct and maintain rock pads for construction entrance/exit.
- B. Install sediment barriers down slope from construction activities that disturb site soil.
- C. Construct rock surface for temporary parking.
- D. Install sediment barriers on the down slope prior to clearing and grubbing.
- E. Install sediment barriers on the down slope side of utility construction and soil stockpiles.
- F. Install sediment barriers on the down slope from disturbed soil during grading activities.

1.10 MINIMUM EROSION AND SEDIMENT CONTROL

- A. The primary technique to be used at this project for stabilizing site soil will be to provide a protective cover of turf grass or pavement.
- B. Within 14 days after construction activity ceases on any particular area, all disturbed ground where there will not be construction for longer than 14 days must be seeded with fast-germinating temporary seed and protected with mulch.
- C. All areas at final grade must be sodded (as required by the Drawings) within 14 days after completion of the major construction activity. Final site stabilization is achieved when a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures.
- D. Construction traffic must enter and exit the site at the stabilized construction entrance. The

purpose is to trap dust and mud that would otherwise be carried off-site by construction traffic.

- E. Water trucks will be used as needed during construction to reduce dust generated on the site. Dust control must be provided by the CONTRACTOR and shall be in compliance with applicable local and state dust control regulations.
- F. No solid materials, including building materials, are allowed to be discharged from the site with storm water. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers shall be emptied periodically by a contract trash disposal service and hauled away from the site.
- G. Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed of so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.
- H. All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and shall be serviced by a commercial operator.
- I. Non-storm water components of site discharge must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or private well approved by the State Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site.
- J. Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated, and disposed at an approved solid waste or chemical disposal facility.
- K. Between the time the SWPPP is implemented and final site stabilization is achieved, all disturbed areas and pollutant controls must be inspected at least once every 7 calendar days, or at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.25 inches or greater (a rain gauge must be maintained on-site). The inspections are to be conducted by the CONTRACTOR'S designated representative.
- L. Sediment barriers must be inspected and, if necessary, they must be enlarged or cleaned in order to provide additional capacity. All material excavated from behind sediment barriers shall be stockpiled on the up slope side. Additional sediment barriers shall be constructed as needed.
- M. All discharge points must be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.
- N. Based on inspection results, any modification necessary to increase effectiveness of this SWPPP to an acceptable level must be made within seven calendar days of the inspection. The inspection reports must be completed entirely, and additional remarks should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with

the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

- O. Inspection reports must be kept on file by the CONTRACTOR as an integral part of this SWPPP for at least three years from the date of completion of the project.
- P. It is the responsibility of the CONTRACTOR to assure the adequacy of site pollutant discharge controls.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

3.01 MEASUREMENT AND PAYMENT

- A. The CONTRACTOR shall be responsible for permit fees.
- B. There shall be no special measurement or payment for the work under this section; it shall be included in the lump sum price bid for Mobilization.

END OF SECTION

**CONTRACTOR
CERTIFICATION**

The contractor and/or subcontractor(s) that will implement the pollutant control measures described in the SWPPP must be identified below. Each must sign a statement certifying that they understand the NPDES general permit authorizing storm water discharges during construction. These statements must be maintained in the SWPPP file on site.

Contractor implementing the SWPPP:

Business Name

Business Address

Business Telephone Number

CERTIFICATION: (Note signature requirements in Part II, Section B.9. of the NPDES General Permit.)

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature

Date

Printed Name

SECTION 010900 DEFINITIONS AND STANDARDS

PART I – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawing and general provisions of contract, including General and Supplementary Conditions and Division 1 and Division 2 Specification Sections, apply to this section.

1.02 DEFINITIONS

- A. General: Basic Contract definitions are included in the General Conditions.
- B. Indicated: The term "Indicated" refers to graphic representations, notes or schedules on the Drawings, or other Paragraphs or Schedules in Specifications, and similar requirements in Contract Documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used, it is to help locate the reference; no limitation on location is intended except as specifically noted.
- C. Directed: Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean "directed by the ENGINEER", "requested by the ENGINEER", and similar phrases. However, no implied meaning shall be interpreted to extend the ENGINEER'S or OWNER'S responsibility into the CONTRACTOR'S area of construction supervision.
- D. Approve: The term "approved", where used in conjunction with the ENGINEER's or OWNER'S action on the CONTRACTOR'S submittals, applications, and requests, is limited to the duties and responsibilities of the ENGINEER or OWNER as stated in General and Supplementary Conditions or the Construction Agreement. Such approval shall not release the CONTRACTOR from responsibility to fulfill Contract requirements unless otherwise provided in the Contract Documents.
- E. Regulation: The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work, whether lawfully imposed by authorities having jurisdiction or not.
- F. Furnish: The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations".
- G. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations".
- H. Provide: The term "provide" means "to furnish and install, complete and ready for the intended use".
- I. Installer: An "Installer" is the CONTRACTOR or an entity engaged by the CONTRACTOR, either as an employee, subcontractor, or sub-subcontractor for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - 1. The term "experienced," when used with the term "Installer" means having a

minimum of five (5) previous Projects similar in size and scope to this Project, being familiar with the precautions required, and having complied with requirements of the authority having jurisdiction.

- J. Project Site: The space available to the CONTRACTOR for performance of construction activities, either exclusively or in conjunction with others performing other construction activities as part of the Project. The extent of the Project Site is shown in the Contract Documents and may or may not be identical with the description of the land upon which the Project is to be built.
- K. Testing Laboratories: A "testing laboratory" is an independent entity engaged by the CONTRACTOR to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

1.03 SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 16-Division format and MASTERFORMAT numbering system.
- B. Specification Content: This Specification uses certain conventions in the use of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is the abbreviated type. Implied words and meanings will be appropriately interpreted. Singular words will be interpreted as plural and plural words interpreted as singular where applicable and where the full context of the Contract Documents so indicates.
 - 2. Imperative and streamlined language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the CONTRACTOR. At certain locations in the text, for clarity, subjective language is used to describe responsibilities that must be fulfilled indirectly by the CONTRACTOR, or by others when so noted.
 - a. The words "shall be" shall be included by inference wherever a colon (:) is used within a sentence or phrase.
- C. Assignment of Specialists: The Specification requires that certain specific construction activities shall be performed by specialists who are recognized experts in the operations to be performed. The specialists must be engaged for those activities, and assignments are requirements over which the CONTRACTOR has no choice or option. Nevertheless, the ultimate responsibility for fulfilling Contract requirements remains with the CONTRACTOR.
 - 1. This requirement shall not be interpreted to conflict with enforcement of building codes and similar regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.
 - 2. Trades: Use of titles such as "carpentry" is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter". It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.

1.04 INDUSTRY STANDARDS

- A. **Applicability of Standards:** Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents. Such standards are made a part of the Contract Documents by reference. Individual Sections indicate which codes and standards the CONTRACTOR must keep available at the Project Site for reference.
- B. **Publication Dates:** Where the date of issue of a referenced standard is not specified, comply with the standard in effect as of date of Contract Documents.
1. **Updated Standards:** At the request of the ENGINEER, CONTRACTOR, or authority having jurisdiction, submit a Change Order proposal/request where an applicable code or standard has been revised and reissued after the date of the Contract Documents and before performance of Work affected. The ENGINEER and OWNER will decide whether to issue a Change Order to proceed with the updated standard.
- C. **Conflicting Requirements:** Where compliance with two or more standards is specified, and they establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement will be enforced, unless the Contract Documents indicate otherwise. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to the ENGINEER for a decision before proceeding.
1. **Minimum Quantity or Quality Levels:** In every instance the quantity or quality level shown or specified shall be the minimum to be provided or performed. The actual installation may comply exactly, within specified tolerances, with the minimum quantity or quality specified, or it may exceed that minimum within reasonable limits. In complying with these requirements, indicated numeric values are minimum or maximum values, as noted, or appropriate for the context of the requirements. Refer instances or uncertainty to the ENGINEER for a decision before proceeding.
- D. **Copies of Standards:** Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed for performance of a required construction activity, the CONTRACTOR shall obtain copies directly from the publication source.
- E. **Abbreviations and Names:** Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations as referenced in Contract Documents are defined to mean the associated names. Names and addresses are subject to change and are believed to be, but are not assured to be, accurate and up to date as of date of the Contract Documents.

AAMA	American Architectural Manufacturer's Association 1827 Walden Office Square Suite 104 Schaumburg, IL 60173	(847) 303-5664
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333	(248) 848-3700

AIA	American Institute of Architects 1735 New York Ave., N.W. Washington, DC 20006	(202) 626-7300
ANSI	American National Standards Institute 11 East 42 nd Street New York, NY 10036	(212) 642-4900
APA	American Plywood Association P.O. Box 11700 Tacoma, WA 98411	(206) 505-8605
ARMA	Asphalt Roofing Manufacturers Association 4041 Powder Mill Road Suite 404 Calverton, MD 20705	(301) 231-9050
ASTM	American Society for Testing and Materials 100 Barrharbor Drive West Conshohoken, PA 19428	(610) 832-9500
AWPA	American Wood Preserver's Association P.O. Box 5690 Grandbury, TX 76049	(817) 326-6300
AWPB	American Wood Preserver's Bureau 2750 Prosperity Avenue Suite 550 Fairfax, VA 22031	(703) 204-0500
AWS	American Welding Society 550 NW 42 nd Avenue Miami, FL 33126	(305) 443-9353
FM	Factory Mutual Engineering and Research 1151 Boston-Providence Turnpike Norwood, MA 02062	(617) 364-2458
FS	Federal Specifications Specifications Unit (WFSIS) 999 "E" Street NW Washington, DC 20463	(202) 694-1000
GA	Gypsum Association 810 1st Street N.E. Suite 510 Washington, DC 20002	(202) 289-5440
ML/SFA	Metal Lath/Steel Framing Association 8 S. Michigan Avenue Suite 1000 Chicago, IL 60603	(312) 456-5590

NAAMM	National Association of Architectural Metal Manufacturers 8 S. Michigan Avenue Suite 1000 Chicago, IL 60603	(312) 332-0405
NCMA	National Concrete Masonry Association 2302 Horse Pen Road Herndon, VA 20171	(703) 713-1900
NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269	(617) 770-3000
NRCA	National Roofing Contractors Association 10255 West Higgins Road Suite 600 Rosemont, IL 60018	(847) 299-9070
NIST	National Institute of Standards of Technology 100 Bureau Drive Gaithersberg, MD 20899	(301) 975-6478
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077	(847) 966-6200
PDI	Plumbing and Drainage Institute 45 Bristol Drive Suite 101 S. Easton, MA 02375	(800) 589-8956
SMACNA	Sheet Metal & Air Conditioning Contractors National Association 4201 Lafayette Center Drive Chantilly, VA 20151	(703) 803-2980
SPIB	Southern Pine Inspection Bureau 4709 Scenic Highway Pensacola, FL 32504	(850) 434-2611
SPRI	Single Ply Roofing Institute 200 Reservoir Street Suite 309A Needham, MA 02494	(781) 444-0242
SSPC	Steel Structures Painting Council 2100 Wharton Street Suite 310 Pittsburgh, PA 15203	(800) 837-8303

1.05 CODES/MANUFACTURER'S RECOMMENDATIONS

- A. Applicable code requirements are included herein by this reference. However, such are minimum criteria and no reduction from Drawings or Specifications will be permitted, even if allowed by applicable code.
- B. Electrical and mechanical apparatus, fixtures and equipment shall bear approved device label of Underwriter's Laboratories.
- C. The local building code and the Standard Building Code (latest adopted edition) apply to all work. In event a conflict occurs between the local vs. Standard Code, the greater requirements shall govern.
- D. Specifically, comply with the following codes:
 - 1. Local Public Utility regulations.
 - 2. Sanitary Code of the Arkansas Department of Health, and pertinent County Board of Health regulations.
 - 3. Municipal and/or County Electrical Code.
 - 4. National Electric Code.
 - 5. Standards of National Board of Fire Underwriters.
 - 6. National Fire Codes.
 - 7. National Fire Protection Association.
 - 8. Arkansas Energy Code.
- E. Comply with recommendations of pertinent manufacturer to achieve first quality work.

1.06 SUBMITTALS:

- A. Permits, Licenses, and Certificates: For the OWNER'S records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar Documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

PART 2 – PRODUCTS – (NOT USED)

PART 3 – EXECUTION – (NOT USED)

END OF SECTION

SECTION 012000 PROJECT MEETINGS

PART I – GENERAL

1.01 PRECONSTRUCTION MEETING

Prior to the delivery of materials or the start of any construction, the CONTRACTOR shall request a Preconstruction Meeting from the ENGINEER. A minimum two (2) working days notice shall be required.

A. Schedule

The ENGINEER will establish the meeting place, time and date, distribute agenda, notify participants, and administer the meeting. The CONTRACTOR shall notify major Subcontractors.

B. Attendance

1. OWNER
2. ENGINEER
3. CONTRACTOR
4. GOVERNMENTAL AGENCIES
 - a. Major Subcontractors
 - b. Utility Companies
 - c. Safety Representatives

5. AS APPLICABLE

C. Agenda

1. The items below are to be distributed by the CONTRACTOR and discussed.
 - a. List of names and telephone numbers for superintendent, foreman and other key personnel.
 - b. List of major subcontractors and suppliers.
 - c. Projected Construction Schedules.
2. Critical Work sequencing.
3. Major equipment deliveries and priorities.
4. Project coordination.
5. Responsibilities of OWNER, ENGINEER, CONTRACTOR and other agencies.
6. Procedures and processing of:
 - a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.

- d. Field Directives.
- e. Change Orders.
- f. Applications for Payment.

- 7. Adequacy of distribution of Contract Documents.
- 8. Procedures for maintaining Record Documents.
- 9. Use of premises.
- 10. Construction Facilities, Controls and Construction bids.
- 11. Temporary utilities.
- 12. Safety and first aid procedures.
- 13. Security procedures.
- 14. Housekeeping procedures.
- 15. Testing

D. Minutes

The ENGINEER will prepare and distribute copies to participants within seven (7) days of meeting. Participants shall report corrections and comments within seven (7) days of receipt of minutes.

1.02 PROGRESS MEETINGS

Progress Meetings will be held weekly or as required by the progress of the Work.

A. Schedule

The ENGINEER will establish the meeting place, time and date, distribute agenda, notify participants and administer the meeting. The CONTRACTOR shall notify major Subcontractors.

B. Attendance

- 1. ENGINEER
- 2. CONTRACTOR
- 3. Subcontractor as appropriate to the agenda.
- 4. Suppliers as appropriate to the agenda.
- 5. Others

C. Agenda

- 1. Distribute finalized minutes from previous meeting.
- 2. Review of work progress since previous meeting.

3. Review construction schedule.
4. Review shop drawings.
5. Review previous and upcoming RFIs.
6. Review pay requests and change orders.
7. Review field observations, problems, and conflicts.
8. Review project look ahead for next month.
9. Review permit status.
10. Review safety concerns.
11. Review customer concerns.
12. Review new business.
13. Review other issues.

D. Minutes

The ENGINEER will prepare and distribute copies to participants within seven (7) days of meeting. Participants shall report corrections and comments within seven (7) days of receipt of minutes.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 013000 SUBMITTALS

PART I – GENERAL

1.01 CONSTRUCTION SCHEDULES

A. Progress Schedules

The CONTRACTOR shall submit Progress Schedules in accordance with the General Conditions and Section 013110 of the Specifications.

B. Submittals Schedule

The CONTRACTOR shall submit two (2) copies of the Submittals Schedule indicating the individual items and submission dates to the ENGINEER within ten (10) working days after the Effective Date of the Agreement. Copies of this Schedule shall be made available by the CONTRACTOR for discussion during the preconstruction meeting.

C. Schedule of Values

The CONTRACTOR shall submit two (2) copies of Schedule of Values for the Work to the ENGINEER within ten (10) calendar days after the Effective Date of the Agreement. The Schedule of Values shall be submitted by the CONTRACTOR for discussion during the preconstruction meeting. The Schedule of Values shall be in accordance with the General Conditions and presented in sufficient detail to serve as the basis for payments during construction.

D. Staking Schedule

The CONTRACTOR shall submit two (2) copies of the Staking Schedule, in accordance with Section 01330 to the ENGINEER prior to mobilization. This Staking Schedule should be updated by the CONTRACTOR and submitted to the ENGINEER on a periodic basis.

1.02 APPLICATIONS FOR PAYMENT

The CONTRACTOR shall submit Applications for Payment to the ENGINEER in accordance with the provisions of the General Conditions. The CONTRACTOR shall submit a completed Application for Payment and Progress Schedule to the ENGINEER not more often than once per month. The ENGINEER will certify payments with the use of ENGINEER'S Certificate for Payment.

1.03 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. General

When used in the Contract Documents, the term "shop drawings" shall be considered to mean Contractor's Drawings for material and equipment which become an integral part of the Project. These drawings shall be complete and detailed. Shop drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, bills of material, wiring and control diagrams, and inspection and test reports including performance curves and certifications as applicable to the Work.

B. Shop Drawings

The shop drawings shall be presented in a clear and thorough manner. Details shall be

identified by reference to Contract Drawing Number and Detail, and Contract Specification Section and Page Number.

Shop drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, bills of material, wiring and control diagrams, and inspection and test reports including performance curves and certifications as applicable to the Work.

All details on shop drawings submitted for review shall show clearly the elevations of the various parts to the main members and lines of the structure and/or equipment, and where correct fabrication of the work depends upon field measurements; such measurements shall be made and noted on the shop drawings before being submitted for review.

C. Product Data

The product data shall be presented in a clear and thorough manner identified the same as the shop drawings. Included with the information shall be performance characteristics and capacities depicting dimensions and clearances required. The manufacturers' standard schematic drawings and diagrams shall be modified to delete information which is not applicable to the Work. Manufacturers' standard information shall be supplemented to provide information specifically applicable to the Work.

D. Samples

The samples shall be of sufficient size and quantity to clearly illustrate functional characteristics of the product with integrally related parts and attachment devices depicting full range of color, texture and pattern. Mark all samples with labels that include project name, date and description.

E. Submission Requirements

The CONTRACTOR shall make submittals in accordance with the approved schedule, and in such sequence as to cause no delay in the Work or in the Work of any other CONTRACTOR. No damages will be awarded or extension of time granted due to the shop drawing and product data review process. After two revisions the CONTRACTOR will be responsible for paying a review fee to the OWNER.

The CONTRACTOR shall submit an entire package of shop drawings and product data information for major items of Work so that the ENGINEER can review the package as a unit.

The number of submittals required shall be one (1) digital copy in pdf format, delivered by email or FTP as directed by the OWNER or ENGINEER, including a stamped CONTRACTOR review cover, and (4) paper copies of all submittal materials, each accompanied by a stamped CONTRACTOR review cover sheet. All four paper copies will be retained by the OWNER and ENGINEER. Submittals shall contain the following information:

- Shop Drawing Number, Title, Submittal Dates, CONTRACTOR'S signature and review stamp.
- Field dimensions, clearly identified as such.
- Relation to adjacent or critical features of the Work or materials.
- Applicable standards, such as ASTM or Federal Specification Numbers.

- Identification of deviations from Contract Documents.
- Identification of revisions on resubmittals.

The CONTRACTOR'S stamp indicating as a minimum the Project Title, Date of Submission, Date of Previous Submission, and Contract Specification Section Reference shall be initialed or signed, certifying the review and approval of submittal per General Conditions, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents.

The ENGINEER shall affix a stamp and initials or signature and indicate confirmation or requirements for resubmittal. The ENGINEER shall return to the CONTRACTOR one (1) electronic copy of review comments and/or approvals for distribution or for resubmission.

F. Resubmission Requirements

The CONTRACTOR shall make all corrections or changes in the submittals required by the ENGINEER and resubmit. The CONTRACTOR shall indicate any changes which have been made other than those requested by the ENGINEER.

G. Variations

All items specified are not necessarily intended to be a manufacturer's standard product. Variations from specified items will be considered on an "or equal" basis. If submittals show variations from Contract requirements because of standard shop practice or for other reasons, the CONTRACTOR shall describe such variations in his letter of transmittal and on the shop drawings along with notification of his intent to seek contract adjustment. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the CONTRACTOR fails to describe such variations he shall not be relieved of the responsibility for executing the Work in accordance with the Contract, even though such drawings have been reviewed. Variations submitted but not described may be cause for rejection. Any variations initiated by the CONTRACTOR will not be considered as an addition to the scope of Work unless specifically noted and then approved as such in writing by the ENGINEER.

1.04 SPECIFICATION SECTION REQUIREMENTS

Miscellaneous schedules, field reports, test reports, affidavits, certificates, permits, agreements and other items identified in the Technical Specification Sections, or as requested by the ENGINEER shall be submitted to the ENGINEER in duplicate. As a minimum, these submittals should be identified with the Project Title, Date of Submission, and Contract Specification Section Reference.

1.05 AUDIO-VIDEO SURVEY

An Audio-Video survey is required for this project. Audio-video survey to be on DVD suitable for recording and play-back on video color equipment.

All recording shall be done during times of good visibility. No recording shall be done during periods of visible precipitation, or when more than ten (10) percent of the ground area is covered with standing water, unless otherwise authorized by the OWNER.

All video shall be properly identified as to location, time, and date in a manner acceptable to the OWNER and the ENGINEER. A copy of the video recording shall be provided to the ENGINEER as a

shop drawing submittal for approval prior to construction. Video recordings will be returned to the CONTRACTOR at the end of the warranty period, or following the resolution of any claims, whichever is longer.

To preclude the possibility of tampering or editing in any manner, all video recordings must, by electronic means, display continuously and simultaneously generated transparent digital information to include the date and time of recording. The date information will contain the month, day, and year. For example, 10/5/12, and be placed directly below the time information. The time information shall consist of hours, minutes, and seconds, separated by colons. For example 10:20:30. This transparent information will appear on the extreme upper left hand third of the screen.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 013110 CONSTRUCTION SCHEDULE AND REPORTS

PART I – GENERAL

1.01 GENERAL REQUIREMENTS AND SCOPE

- A. Pursuant to the General Conditions of this contract, the following additional scheduling requirements are a part of this Contract.
- B. Work under this Section shall consist of furnishing a Construction Schedule showing in detail how the CONTRACTOR plans to execute and coordinate the Work. The Contract Schedule shall be based on and incorporate the Contract Milestone and Completion Dates specified in the Owner-Contractor Agreement and shall show the order in which the CONTRACTOR shall perform the Work, projected dates for the start and completion of separable portions of the Work, and any other information concerning the CONTRACTOR'S Work scheduling as the OWNER may request. The proposed Construction Schedule and related Schedule of Values must be submitted to the ENGINEER and the OWNER prior to mobilization of the site.
- C. The Construction Schedule shall be in the form of a bar chart and shall consist of horizontal lines, or bars, plotted along a daily time scale. Each pay item designed in the CONTRACTOR'S Schedule of Values shall be denominated as a separate activity and represented by a horizontal bar or bars on the chart. The time-scale shall indicate all required Milestone and Completion Dates as set forth in the Owner-Contractor Agreement. The horizontal bar(s) shall indicate the start and finish dates as well as the total time period of performance for each pay item activity. The CONTRACTOR shall arrange the chart so as to show the pay item activities, the allotted timeline to fulfill each and every Milestone and Completion Date requirement. This Schedule must be submitted by the CONTRACTOR prior to commencement of Work and award of Contract.
- D. Each Work item on the bar chart, as well as being correlated to the payment document, shall be broken into reasonable work segments/activities (where practicable) with individual starting and stopping dates. As a minimum, Work shall be segmented to demonstrate its relationship to the various Milestone Dates, if any. The segmented Work activities shall be cost loaded to show their dollar value as part of the entire pay item. Activity titles shall be self-explanatory; abbreviations shall be shown in the legend.
- E. If the CONTRACTOR should desire or intend to complete the Work earlier than any required Milestone or Completion date, the OWNER or the ENGINEER shall not be liable to the CONTRACTOR for any costs or other damages should the CONTRACTOR be unable to complete the Work before such Milestone or Completion date. The duties, obligations and warranties of the OWNER to the CONTRACTOR shall be consistent with and applicable only to the completion of the Work on the Milestone and completion dates required in the Owner-Contractor Agreement, unless the OWNER, ENGINEER and CONTRACTOR otherwise agree in a written Change Order.

1.02 UPDATES AND REVISIONS

- A. The chart shall be updated to show actual progress and the effect of modifications, delays and other events. A second bar for each Work item, in a contrasting color or pattern, shall be drawn parallel to the proposed schedule to show actual progress and to forecast future progress. The actual start and stop dates shall be entered, as well as the actual dates of the Milestone events. Updates are to be submitted monthly to the ENGINEER with, and as part of, each payment request.

- B. The updated Construction Schedule submitted by the CONTRACTOR shall not show a completion date later than the Contract Time, subject to any time extensions approved by the OWNER; provided, however, that if the CONTRACTOR believes he is entitled to an extension of the Contract under the Contract Documents, the CONTRACTOR shall submit to the ENGINEER, the appropriate requests pursuant to General Conditions, including with each update, a separate schedule analysis (entitled "Requested Time Adjustment Schedule") indicating suggested adjustments in the Contract Time which should, in the opinion of the CONTRACTOR, be made by time extension, due to changes, delays or conditions occurring during the past month or previously, or which are expected or contemplated by the CONTRACTOR (whether such conditions are excusable under the Contract or are allegedly due to CONTRACTOR or OWNER fault); this separate schedule, if submitted, shall be accompanied or preceded by a formal time extension request as required by the Contract Documents and a detailed narrative justifying the time extension requested. To the extent any time extension requests are pending at the time of any update in the Construction Schedule, the "Requested Time Adjustment Schedule" shall be updated also each month, to reflect any adjustments made by the CONTRACTOR in the Construction Schedule, or any time extensions previously granted by the OWNER, and to reflect actual or expected progress. Neither the ENGINEER nor the OWNER shall have any obligation to consider any time extension request unless the requirements of the Contract Documents, and specifically, but not limited to, the requirements set forth in this paragraph, are complied with; and neither the ENGINEER nor the OWNER shall be responsible to the CONTRACTOR for any constructive acceleration due to failure of OWNER to grant time extensions under the Contract Documents should the CONTRACTOR fail to substantially comply with the submission requirements and the justification requirements of this CONTRACTOR for time extension requests. CONTRACTOR'S failure to perform in accordance with the Construction Schedule shall not be excused, nor be chargeable to the OWNER, nor the ENGINEER, because the CONTRACTOR has submitted time extension requests or the "Requested Time Adjustment Schedule."
- C. Neither the updating of the CONTRACTOR'S work schedule nor the submission, updating, change or revision of any other report or schedule submitted to the OWNER by the CONTRACTOR nor review or non-objection of the OWNER or ENGINEER of any such report or schedule shall have the effect of amending or modifying, in any way, the Contract Completion Date, Milestone Dates or of modifying or limiting, in any way, the CONTRACTOR'S obligations under this Contract.
- D. All of the CONTRACTOR'S detailed calculations and documents supporting all schedules, reports, and forecasts shall be available to the OWNER and ENGINEER on request.
- E. Each updated Construction Schedule submitted by the CONTRACTOR to the ENGINEER shall be accompanied by a narrative report which reflects the following:
1. Description of Work accomplished since submission of previous progress schedule;
 2. Comparison of the actual status of the Work with the CONTRACTOR'S project schedule;
 3. Status of equipment and material deliveries;
 4. Personnel staffing schedule;
 5. Causes of any delays;
 6. Revision of schedules; and
 7. Action proposed to restore schedule.
- F. Pursuant to the General Conditions, should any of the conditions exist such that certain activities shown on the CONTRACTOR'S Construction Schedule fall behind schedule to the extent that any of the mandatory specific or milestone dates or completion dates are in

jeopardy, the CONTRACTOR shall be required to, at no extra cost to the OWNER, prepare and submit to the ENGINEER a supplementary Recovery Schedule, in a form and detail appropriate to the need, to explain and display how he intends to reschedule those activities to regain compliance with the Construction Schedule during the immediate subsequent pay period.

1.03 SCHEDULE OF OFF-SITE ACTIVITIES

- A. The CONTRACTOR shall include in his Construction Schedule all procurements related activities which lead to the delivery of materials to the site in a timely manner. Upon written approval by the OWNER, these activities may be submitted as a separate Off-Site Activities Schedule, properly correlated to the Construction Schedule. The schedule of off-site activities shall include, but is not limited to, the following:
 - 1. Dates for submittals, ordering, manufacturing, or fabricating and delivery of equipment and materials. Long lead items requiring more than one month between ordering and delivery to site shall be clearly noted;
 - 2. All significant activities to be performed by the CONTRACTOR during the fabrication and erection/installation in a CONTRACTOR'S plant or on a job site, including materials/equipment purchasing, delivery; and
 - 3. CONTRACTOR'S drawings and submittals to be prepared and submitted through the ENGINEER to the OWNER for approval.
- B. The CONTRACTOR shall be solely responsible for expediting the delivery of all materials to be furnished by him so that the construction progress shall be maintained according to the current schedule for the Work as approved by the ENGINEER.
- C. The ENGINEER shall be advised in writing by the CONTRACTOR wherever it is anticipated or determined by the CONTRACTOR that the delivery date of any material and/or equipment furnished by the CONTRACTOR for installation will be later than the delivery dates shown on the schedule, subject to schedule updates.
- D. Submittals, equipment orders and similar items are to be treated as schedule activities.

1.04 FLOAT TIME

- A. Float or slack time is defined as the amount of time between the earliest start date and the latest start date or between the earliest finish date and the latest finish date of an activity on the Construction. Float or slack time is for the exclusive use and benefit of the OWNER. The CONTRACTOR acknowledges and agrees that actual delays, affecting activities containing float time, will not have any effect upon contract completion times, providing that the actual delay does not exceed the float time associated with those activities.
- B. Extensions of time for performance as described in the Contract Documents will be granted only to the extent that time adjustment for the activity or activities affected by any condition or event which entitles the CONTRACTOR to a time extension exceed the total float or slack of the affected activity at the time of issuance of a Change Order or the commencement of any delay or condition for which an adjustment is warranted under the Contract Documents.

1.05 COORDINATION

- A. The CONTRACTOR shall coordinate his work with that of other contractors and shall cooperate fully with the ENGINEER in maintaining orderly progress toward completion of the work as scheduled. The ENGINEER'S decisions regarding priority between the CONTRACTOR'S work and the work of other contractors at the site shall be final and shall not be cause for extra compensation or extension of time, except where extension of time is granted because of a delay for which CONTRACTOR is otherwise entitled to an extension of time under the Contract Documents.
- B. The milestone dates referred to in the Contract Documents for delivery of OWNER direct-purchased equipment and materials and interface activities of other contractors on the site are based on dates set forth in separate contracts with the OWNER and represent the information available at this time.
- C. Failure of OWNER direct-purchased equipment and materials to arrive as scheduled, or failure of other construction contractors to meet their schedule, shall not be justification for an extension of time, except where such failure causes, in the opinion of the ENGINEER, an unreasonable delay in the CONTRACTOR'S work, in which case the provisions of the General Conditions regarding extensions of time and extra work shall apply.
- D. The CONTRACTOR shall keep himself, and his subcontractors, advised at all times during the course of the Work regarding delivery status of OWNER direct purchased equipment and materials and of the progress of construction work being performed under separate contracts.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

**SECTION 013300
CONSTRUCTION STAKING**

PART I – GENERAL

1.01 GENERAL REQUIREMENTS

A. Responsibility for Staking

The CONTRACTOR will set stakes and markers showing the locations of various parts of the Work as outlined herein. It shall be the responsibility of the CONTRACTOR to transfer surface line and grade for any other than normal surface open cut operations which the CONTRACTOR may conduct, and also for any operations where ordinary surface line and grade is not feasible.

1.02 RELOCATION AND RE-ESTABLISHMENT

A. Survey Control Points

The CONTRACTOR shall bear all expense involved in re-establishing and/or resetting any survey control point, land survey point or monument lost or disturbed during his construction operation. Such Work shall be done under the direct supervision of a State of Arkansas licensed land surveyor.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 013800 CONSTRUCTION PHOTOGRAPHS

PART I – GENERAL

1.01 SCOPE OF WORK

- A. The CONTRACTOR shall employ a competent photographer to take construction record photographs prior to start of work and periodically during the course of the Work.
- B. Related Requirements Described Elsewhere:
 - 1. Section 01010: Summary of Work
 - 2. Section 01300: Submittals

1.02 PHOTOGRAPHY REQUIRED

- A. Photographs shall be taken at each of the major stages of construction and as directed by the ENGINEER.
- B. Photographs may be taken by the CONTRACTOR'S personnel but must be of professional quality as herein specified. Photographs which are deemed unsatisfactory will be rejected and retakes will be required.
- C. Views Required
 - 1. One (1) view of each activity as directed by the ENGINEER, up to a limit of thirty (30) activities photographed per month.
 - 2. Five (5) views of overall Project site monthly, as directed by the ENGINEER.
 - 3. Each side of each structure on site, if applicable, where construction activities are present monthly.
- D. Reproduction
 - 1. All photographs shall be provided in digital format on CD or DVD.
 - 2. The photographer shall agree to furnish hard-copy prints to OWNER and the ENGINEER at commercial rates applicable at time of purchase.

1.03 COST OF PHOTOGRAPHY

- A. The CONTRACTOR shall pay costs for specified photography and storage media. Parties requiring additional photography or prints will pay the photographer directly.

PART 2 – PRODUCTS

2.01 DIGITAL PRINTS

- A. Photographs taken in accordance with this Section shall be furnished to the ENGINEER on two (2) sets of CDs or DVDs, cumulative of all photos to date, and attached with each pay request.
- B. Each photograph shall be 1200x800 pixels, 360 DPI true color minimum resolution in JPEG

file format.

- C. Each photograph shall bear a date and time stamp.
- D. A log, prepared in Microsoft Excel, shall be included on the CD or DVD. The log shall state the digital file name, date of photograph and orientation of view. Additional, pertinent comments may be placed on the log at the discretion of the CONTRACTOR.

2.02 HARD-COPY PRINTS

- A. General
 - 1. Hard-copy prints will not be provided unless specifically requested by the OWNER. The print requests shall be made as outlined in Article 1.02.D.2 of this Section.
- B. Type of Print
 - 1. Paper: Single weight, color print paper.
 - 2. Finish: Smooth surface, glossy.
 - 3. Size: 8 inch x 10 inch
- C. Identify each print on back, listing
 - 1. Name of project
 - 2. Orientation of view
 - 3. Date and time of exposure
 - 4. Name and address of photographer
 - 5. Photographer's numbered identification of exposure

PART 3 – EXECUTION

3.01 TECHNIQUE

- A. Factual Presentation.
- B. Correct exposure and focus.
 - 1. High resolution and sharpness
 - 2. Maximum depth-of-field
 - 3. Minimum distortion

3.02 VIEWS REQUIRED

- A. Photograph from locations to adequately illustrate condition of construction and state of progress.
 - 1. At successive periods of photography, take at least one photograph from the same overall view as previously photographed.
- B. The photographer shall comply with all directions given by the ENGINEER.

3.03 DELIVERY OF PRINTS

- A. Deliver digital photographs on two (2) sets of CDs or DVDs to the ENGINEER to accompany

each Application for Payment.

- B. The CONTRACTOR shall store all photographs electronically for the project record file until the end of the project. A final, comprehensive CD or DVD of all photographs shall be delivered with Project Record Documents as specified in Section 01700.

END OF SECTION

SECTION 014000 QUALITY CONTROL SERVICES

PART I – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawing and general provisions of contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for quality control services.
- B. Quality control services include inspections, tests and related actions including reports, performed by independent agencies, governing authorities, and the CONTRACTOR. They do not include Contract enforcement activities performed by the ENGINEER or the OWNER.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the CONTRACTOR of responsibility for compliance with Contract Document requirements.

1.03 RESPONSIBILITIES

- A. **CONTRACTOR Responsibilities:** The CONTRACTOR shall provide inspections, tests and similar quality control services as summarized below or specified in individual Specification Sections and required by governing authorities, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the CONTRACTOR. Costs for these services shall be included in the Contract Sum. The testing agency shall be subject to the approval of the OWNER.
 - 1. The OWNER may elect to engage and pay for the services of an independent agency to perform inspections and tests specified as the OWNER'S responsibility, or at the discretion of the OWNER.
 - 2. Where the OWNER has engaged a testing agency or other entity for testing and inspection of a part of the Work, and the CONTRACTOR is also required to engage an entity for the same or related element, the CONTRACTOR shall not employ the entity engaged by the OWNER, unless otherwise agreed in writing with the OWNER.
- B. **Retesting:** The CONTRACTOR is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the CONTRACTOR'S responsibility.
 - 1. Cost of retesting construction revised or replaced by the CONTRACTOR is the CONTRACTOR'S responsibility, where required tests were performed on original construction.
- C. **Associated Services:** The CONTRACTOR shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:
 - 1. Providing access to the Work and furnishing incidental labor and facilities necessary

to facilitate inspections and tests.

2. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 3. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
 4. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 5. Security and protection of samples and test equipment at the Project Site.
- D. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, samplings and testing of materials and construction specified in individual Specification Sections shall cooperate with the ENGINEER and CONTRACTOR in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.
1. The Agency shall notify the ENGINEER and CONTRACTOR promptly if irregularities or deficiencies observed in the Work during performance of its activities. The Agency may not approve or accept any portion of the Work.
 2. The Agency is not authorized to release, alter or enlarge requirements of the Contract Documents.
 3. The Agency shall not perform any duties of the CONTRACTOR.
- E. Coordination: The CONTRACTOR and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition, the CONTRACTOR and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
1. The CONTRACTOR is responsible for scheduling times for inspections, tests, taking samples and similar activities.

1.04 SUBMITTALS

- A. The independent testing Agency shall submit a certified written report of each inspection, test or similar service, to the ENGINEER, in triplicate, and a copy of each inspection shall be sent to the OWNER.
1. Submit additional copies of each written report directly to the governing authority, when the authority so directs.
 2. Report Data: Written reports of each inspection, test, or similar service shall include, but is not be limited to:
 - a. Date of issue.
 - b. Project title and number.
 - c. Name, address and telephone number of testing agency.
 - d. Dates and locations of samples and tests or inspections.
 - e. Names of individuals making the inspection or test.

- f. Designation of the Work and test method.
- g. Identification of product and Specification Section.
- h. Complete inspection or test data.
- i. Test results and an interpretation of test results.
- j. Ambient conditions at the time of sample-taking and testing.
- k. Comments or professional opinion as to whether inspection or testing Work complies with Contract Document requirements.
- l. Name and signature of laboratory inspector.
- m. Recommendations on retesting.

1.05 QUALITY ASSURANCE

- A. Qualifications for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which specialize in the types of inspections and tests to be performed.
 - 1. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State in which the Project is located.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION

3.01 INSPECTION OF CONDITIONS

- A. Installer's Inspection of Conditions: Require the installer of each major unit of Work to inspect the substrate to receive Work and conditions under which the Work is to be performed. The installer shall report all unsatisfactory conditions in writing to the CONTRACTOR. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.
- B. Manufacturer's Instructions: Where installations include manufactured products, comply with the manufacturer's applicable instructions and recommendations for installation, to the extent that these instructions and recommendations are more explicit or more stringent than requirements indicated in the Contract Documents.
- C. Inspect each item of materials or equipment immediately prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods for securing Work. Secure Work true to line and level, and within recognized industry tolerances. Allow for expansion and building movement. Provide uniform joint width in exposed Work. Arrange joints in exposed Work to obtain the best visual effect to the satisfaction and approval of the ENGINEER and the OWNER. Refer questionable visual-effect choices to the ENGINEER and the OWNER for final decision.
- E. Recheck measurements and dimensions of the Work, as an integral step of starting each installation.
- F. Install each unit of Work during weather conditions and project status that will insure the best possible results in coordination with the entire Work. Isolate each unit of Work from

incompatible Work as necessary to prevent deterioration.

- G. Coordinate enclosure of the Work with required inspections and tests, so as to minimize the necessity of uncovering Work for that purpose.
- H. Mounting Heights: Where mounting heights are not indicated, mount individual units of Work at industry recognized standard mounting heights for the particular application indicated. Refer questionable mounting height choices to the Architect for final decision.

3.02 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes.
- B. Protect construction exposed by or for quality control service activities, and protect repaired construction.
- C. Repair and protection is the CONTRACTOR'S responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

END OF SECTION

**SECTION 015000
CONSTRUCTION FACILITIES AND TEMPORARY CONTROL**

PART I – GENERAL

1.01 LAND FOR CONTRACTOR'S USE

A. Site Access and Parking

The CONTRACTOR shall locate roads, drives, walks and parking facilities to provide uninterrupted access to construction offices, mobilization, work, storage areas, and other areas required for execution of the Contract.

The CONTRACTOR shall maintain driveways a minimum of 15 feet wide between and around combustible materials in storage and mobilization areas.

The CONTRACTOR shall maintain traffic areas as free as possible of excavated materials, construction equipment, products, and debris.

The CONTRACTOR shall not utilize existing parking facilities for construction personnel or for the CONTRACTOR'S vehicles or equipment, unless written permission from the owner of the parking facility is obtained.

B. Trucking Route and Public Road Maintenance

Prior to the start of construction, the CONTRACTOR shall submit for review a schedule and list indicating the streets and roads within the municipality that his equipment will use off the Project site.

The CONTRACTOR shall comply with all safety requirements, weight restrictions and speed limits.

All gravel and dirt roads or streets used shall be maintained by grading, placing dust palliatives and maintenance gravel in sufficient quantities to eliminate dust and maintain traffic.

Paved streets shall be maintained in a reasonable state of cleanliness and the CONTRACTOR shall remove accumulations of debris, dirt or mud caused by his operations. This shall be done at the close of each days operation or when requested by the ENGINEER.

In order to insure adequate street maintenance as outlined above, the CONTRACTOR may be required to deposit a cash Road Protection Bond with the Agency having jurisdiction. This Bond, if required, will be held in escrow until final release is given by the Agency having jurisdiction. In the event the CONTRACTOR fails or neglects to maintain the streets to the satisfaction of the Agency having jurisdiction, the Agency having jurisdiction shall have the required maintenance work done and the cost incurred shall be deducted from the Road Protection Bond. At the completion of the Project, the Agency having jurisdiction shall return the Road Protection Bond less any monies expended by the Agency having jurisdiction and shall render to the CONTRACTOR an accounting of all monies so expended.

C. Private or Public Roads, Sidewalks and Parking Areas

The CONTRACTOR shall at all times provide emergency access to property in the vicinity of the construction for police and fire equipment, ambulances or other emergency vehicles to protect life, health and property.

Where public roads, driveways, parking areas and sidewalks are encountered throughout the community, the CONTRACTOR shall maintain those portions affected by the construction operations in a passable condition until such time as final restoration of these improvements can be made as herein specified. If, in the opinion of the ENGINEER, the public safety is in danger or the necessity exists for maintaining traffic, he may direct that backfilling be completed immediately. In the event that the necessary backfill material and equipment are not available when direction is given for immediate backfill, the trench shall be backfilled with native material to provide for the necessary maintenance of traffic and safety; however, the native material shall be removed within 48 hours and the trench properly backfilled as herein specified.

Where private roads are encountered throughout the community, the CONTRACTOR shall maintain those portions affected by its construction operations in a passable condition. These roads shall be maintained by the use of crushed shell, crushed stone, slag or compacted earth as required. Upon completion of the construction activities, the CONTRACTOR shall shape and regrade these roads leaving them in a condition adequate for normal travel.

1.02 TRAFFIC MAINTENANCE AND CONTROL

A. Road Closing

No street, road or section thereof shall be closed to through traffic unless otherwise provided for on the Plans, Specifications, or authorized by the Agency with jurisdiction over the roads. Prior to closing a street, road, or section thereof, the CONTRACTOR shall provide the ENGINEER with a copy of a detour Plan approved by the Agency having jurisdiction over the roads.

In the event roads or streets are to be closed, the CONTRACTOR shall notify the local fire department, police department, local road authority, ambulance and emergency services, Department of Public Works, U.S. Postal Department, public transit authority and public school system daily as to what streets will be partly blocked or closed, the length of time the streets will be blocked or closed and estimated when the streets will be reopened to traffic. The CONTRACTOR shall designate one responsible employee to carry out the requirements of this condition.

B. Maintaining Traffic

The CONTRACTOR shall provide access for local traffic to property along the Project by means of temporary roads, drives, culverts or other means approved by the ENGINEER. The CONTRACTOR shall grade, add surfacing materials, and dust palliatives to such temporary roads and drives as necessary for the proper maintenance of traffic.

Where the shoulder is used to maintain traffic, the shoulder shall be graded, surfaced, treated for dust, constructed, or reconstructed, as specified herein or as shown on the Plans. If the construction Work is suspended due to weather conditions or for any other reason, sufficient labor, materials and equipment shall be ready for immediate use at all times for the proper maintenance of traffic. Surfacing materials and dust palliatives shall be applied at such times and locations and in such amounts as directed by the ENGINEER.

Where shoulders are low, high, soft or rough, adequate provisions shall be taken to inform and protect the traveling public by means such as construction warning signs, barricades, lighted devices, etc. Such shoulder hazards shall be eliminated as soon as practicable.

The CONTRACTOR shall furnish, erect and maintain all signs, barricades, lights, traffic

regulators, in accordance with the requirements of the current Manual of Uniform Traffic Control Devices, and all flagmen and watchmen or uniformed officers as are necessary to maintain and safeguard traffic along the entire Project. Failure to comply with these requirements may be cause to issue a stop Work Order, which shall remain in effect until all necessary devices are in place and operational. The issuance of a stop Work Order shall not be reason for granting additional compensation or an extension to the Contract time.

C. Existing Signs

No stop sign, traffic control or warning device shall be taken down until the agency having jurisdiction over the roads has been notified and arrangements for the immediate reinstallation has been made. The CONTRACTOR shall provide temporary signs, traffic control devices, warning devices, or watchmen continuously from the time the item is removed until it is reinstalled. All signs removed shall be replaced with signs meeting requirements of the agency having jurisdiction over the roads.

1.03 TEMPORARY UTILITY SERVICES

A. Electricity and Lighting

The CONTRACTOR shall be responsible for and pay all costs for the installation and removal of circuit and branch wiring, with area distribution boxes located so that power and lighting is available throughout the construction by the use of construction-type power cords and shall pay all costs of electrical power used.

Electrical wiring and distribution shall conform to the National Electrical Code as adopted by the State of Arkansas.

B. Use of Water

The CONTRACTOR shall acquire any and all permits, post any bonds and pay all fees required by the local Agency having jurisdiction prior to using any hydrant as the source of water.

C. Sanitary Provisions

The CONTRACTOR shall be responsible for installation, maintenance and removal of temporary sanitary facilities for use of construction personnel and ENGINEER. All rules and regulations of the State and local health officials shall be observed, with precautions taken to avoid creating unsanitary conditions.

1.04 FIELD OFFICE

A field office will not be required for this project.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 015680
TEMPORARY EROSION AND SEDIMENTATION CONTROL

PART I – GENERAL

1.01 DESCRIPTION

- A. At the Preconstruction Meeting, provide the OWNER with the CONTRACTOR'S plan to prevent, control, and reduce erosion and water pollution, meeting the requirements and special conditions or any required permits authorizing project construction.
- B. If a National Pollutant Discharge Elimination System (NPDES) permit is issued or approved by the DEQ, the CONTRACTOR'S plan shall be prepared as a part of the Approved Stormwater Pollution Prevention plan (SWPPP) as described in Section 010610.

1.02 SCOPE OF WORK

- A. The Work specified in this Section consists of planning, designing, providing, maintaining and removing temporary erosion and sedimentation controls as required by Rules and Regulations and permit conditions.
- B. Temporary erosion controls include, but are not limited to, grassing, mulching, setting, watering and reseeding on-site surfaces and soil and borrow area surfaces and providing interceptor ditches at ends of berms and at those locations which will ensure that erosion during construction will be either eliminated or maintained within acceptable limits as established by the OWNER.
- C. Temporary sedimentation controls include, but are not limited to, silt dams, traps, barriers, and appurtenances at the foot of sloped surfaces which will ensure that sedimentation pollution will be either eliminated or maintained within acceptable limits as established by the OWNER.
- D. The CONTRACTOR is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective.

1.03 RELATED WORK DESCRIBED ELSEWHERE

- A. Section 010600: Regulatory Requirements and Permits
- B. Section 010610: SWPPP and NPDES Requirements
- C. Section 022000: General Earthwork

1.04 QUALITY ASSURANCE

- A. Erosion and sedimentation control measures shall be in compliance with the best management practices as outlined in the DEQ Construction Stormwater General Permit and the EPA BMP Manual.

PART 2 – PRODUCTS

2.01 SEDIMENTATION CONTROL

- A. Silt fence per the plans.
- B. Sod per the specifications.
- C. Filter stone shall be crushed stone which conforms to ARDOT specifications.
- D. Fertilizer, Seeding and Hydroseeding shall be furnished per the specifications.

PART 3 – EXECUTION

3.01 POLLUTION PREVENTION PLAN

- A. The SWPPP will include this erosion control plan and all additional measure that will be employed to dispose of, control, or prevent the discharge of solid, hazardous, and sanitary wastes to waters of the U.S.
- B. The OWNER and ENGINEER will review and approve the CONTRACTOR'S part of the SWPPP, including required signed certification statements, before construction activities begin.
- C. Failure of the CONTRACTOR to sign any required documents or certification statements will be considered a default of the Contract.
- D. Any earth disturbing activities performed without the required signed documents or certification statements may be considered a violation of the Clean Water Act by the EPA.
- E. When a SWPPP is required, prepare the erosion control plan in accordance with the sequence of operations and present in the NPDES Stormwater Pollution Prevention Plan required format provided by the DEQ. The erosion control plan shall describe, but not be limited to the following items or activities:
 - 1. For each phase of construction operations or activities, supply the following information:
 - a. Locations of all erosion control devices
 - b. Types of all erosion control devices
 - c. Estimated time erosion control devices will be in operation
 - d. Monitoring schedules for maintenance of erosion control devices
 - e. Methods of maintaining erosion control devices
 - f. Containment or removal methods for pollutants or hazardous wastes
 - 2. The name and telephone number of the person responsible for monitoring and maintaining the erosion control devices.

3.02 SEDIMENTATION CONTROL

Install and maintain silt dams, traps, barriers, and appurtenances as shown on the approved descriptions and working drawings. Filter stone which is dislodged shall be replaced.

3.03 PERFORMANCE

- A. Should any of the temporary erosion and sediment control measures employed by the CONTRACTOR fail to produce results which comply with the requirements of the State of Arkansas, the OWNER or ENGINEER, the CONTRACTOR shall immediately take whatever steps are necessary to correct the deficiency at his own expense.

- B. The CONTRACTOR shall comply with the Stormwater Pollution Prevention Plan provided in this section and all NPDES records shall be kept on-site and available for inspection if required.

END OF SECTION

SECTION 016000 MATERIAL AND EQUIPMENT

PART I – GENERAL

1.01 TRANSPORTATION AND HANDLING

A. Transportation

The CONTRACTOR shall provide for expeditious transportation and delivery of materials and equipment to the Project site in an undamaged condition and on a schedule to avoid delay of the Work. Materials and equipment shall be delivered in original containers or packaging with identifying labels intact and legible.

B. Handling

The CONTRACTOR shall provide equipment and personnel at the site to unload and handle materials and equipment in a manner to avoid damage. Materials and equipment shall be handled only at designated lifting points by methods to prevent bending or over stressing.

1.02 STORAGE AND PROTECTION

A. Storage

The CONTRACTOR shall store materials and equipment immediately on delivery and protect it until installed in the Work.

Materials shall not be stored in preserve areas of existing vegetation that is to remain.

Products subject to damage by elements shall be stored in weather tight enclosures with temperature and humidity ranges as required by manufacturers instructions.

Loose granular materials shall be stored on solid surfaces to prevent mixing with foreign matter.

The place of storage shall be located so as to minimize interference with traffic and to provide easy access for inspection. No material shall be stored closer than five (5) feet to the edge of a pavement or traveled way open to the public.

Materials that have been stored shall be subject to retest and shall meet the requirements of their respective specifications at the time they are to be used in the Work.

1.03 MANUFACTURERS INSTRUCTIONS

When Contract Documents require that installation of Work shall comply with manufacturer's instructions, the CONTRACTOR shall obtain and distribute copies of such instructions to parties involved in the installation including two copies to the ENGINEER. The CONTRACTOR shall handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with ENGINEER for further instructions.

1.04 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Products List

Within four (4) days of request, the CONTRACTOR shall submit a complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor, if applicable, to the ENGINEER.

B. CONTRACTOR'S Product Options

1. For products specified only by reference standard, the CONTRACTOR may, with OWNER approval, select any product meeting that standard. An item may be considered equal to the item so named or described if, in the opinion of the OWNER and ENGINEER:
 - a. It is at least equal in quality, durability, appearance, strength, and design;
 - b. It will perform at least equally the specific function imposed by the general design for the work being contracted for or the material being purchased; and
 - c. It conforms substantially, even with deviations, to the referenced standards.

Approval by the OWNER and the ENGINEER will be granted based upon considerations of quality, workmanship, economy of operation, suitability for the purpose intended, and acceptability for use on the Project.

2. For products specified by naming several products or manufacturers the CONTRACTOR shall select any one (1) of the products or manufacturers named, which complies with the specifications.
3. For products specified by naming one (1) or more products or manufacturers and or equal, the CONTRACTOR must submit a Substitution Request Form for any product or manufacturer not specifically named, in accordance with the General Conditions.
4. For products specified by naming only one (1) product and manufacturer, there is no option.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 017000 PROJECT CLOSEOUT

PART I – GENERAL

1.01 CLEANING

The CONTRACTOR shall perform periodic cleaning to keep the Work, the site and adjacent properties free from accumulations of waste materials, rubbish and wind-blown debris, resulting from construction operations. Waste material, debris and rubbish shall be periodically removed from the Work Site and disposed of at legal disposal areas away from the site. Prior to OWNER acceptance the CONTRACTOR shall conduct an inspection.

1.02 PROJECT RECORD DOCUMENTS

The CONTRACTOR shall deliver one (1) copy of all Specifications, Addenda, Shop Drawings and Samples, annotated to show all changes made during the construction process, to the ENGINEER upon completion of the Work. Submittal of the Record Documents shall be made with a transmittal letter containing:

- Date
- Project Title and Number
- CONTRACTOR'S Name and Address
- Title and Number of each Record Document
- Certification that each Document as submitted is complete and accurate
- Documents shall be submitted in good order and in a legible condition.

1.03 RECORD DRAWINGS

Upon completion of the project, the CONTRACTOR shall provide the ENGINEER with a complete set of record drawings. Any changes shall be clearly marked in ink on reproduces provided by the ENGINEER. This is the responsibility of the CONTRACTOR and shall not be construed to be the responsibility of any other party.

1.04 SCHEDULING

The CONTRACTOR shall coordinate efforts between the ENGINEER, any equipment manufacturers, subcontractors and governing agencies in the scheduling of required close-out procedures

1.05 SUBSTANTIAL COMPLETION

Certification that the Work is substantially complete shall be in accordance with the General Conditions.

1.06 FINAL PAYMENT AND ACCEPTANCE

The final inspection, final application for payment and acceptance shall be in accordance with the General Conditions.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 017100 CLEANING

PART I – GENERAL

1.01 REQUIREMENTS

- A. The CONTRACTOR shall execute cleaning during progress of the Work and at completion of the Work, as required by the General Conditions and these specifications.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. All applicable sections of the Specifications
- B. General Conditions

1.03 DISPOSAL REQUIREMENTS

- A. The CONTRACTOR shall conduct its cleaning and disposal operations to comply with all applicable codes, ordinances, regulations, and anti-pollution laws.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. The CONTRACTOR shall use only those cleaning materials which will not create hazards to health or property, and which will not damage surfaces.

PART 3 – EXECUTION

3.01 DURING CONSTRUCTION

- A. The CONTRACTOR shall execute cleaning as determined necessary by the ENGINEER or OWNER to keep the Work, the site and adjacent properties free from accumulation of waste material, rubbish and windblown debris, resulting from Construction Work. Site cleaning shall be performed not less than weekly.
- B. The CONTRACTOR shall provide on-site containers for the collection of waste materials, debris and rubbish.
- C. The CONTRACTOR shall remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

3.02 DUST CONTROL

- A. Perform operations so that dust and other contaminants resulting from Construction Work operations will not cause any damages or maintenance problems to adjacent properties.
- B. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly coated surfaces.

3.03 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Power brush clean paved roadways.
- C. Remove all trash and debris in roadways, sidewalk, and landscape areas
- D. Broom clean sidewalk surfaces, power clean if determined necessary by ENGINEER; rake clean other surfaces of the project area.
- E. Prior to final completion, CONTRACTOR shall conduct an inspection to verify the entire work is clean.
- F. All storage and staging areas shall be cleaned and returned to prior conditions or better as per requirements of this Section.

3.04 MEASUREMENT AND PAYMENT

- A. There shall be no special measurement or payment for the work under this section. It shall be included in the lump sum price bid for Mobilization.

END OF SECTION

SECTION 020000
REMOVAL OF WASTE AND SOIL FROM PONDS

PART I – GENERAL

1.01 DESCRIPTION

A. Work Included

Removal of waste and soil from ponds shall include:

1. Pumping of liquid waste from two (2) ponds into tanker trucks, and transport and disposal of liquid waste at an approved, licensed, or permitted facility outside of the Buffalo River Watershed.
2. Removal of waste solids from two (2) ponds into tanker trucks or lined and covered dumped trucks, and transport and disposal of waste solids at an approved, licensed, or permitted facility outside of the Buffalo River Watershed.
3. Excavation and removal of 6” of soil from bottom and inside levees of two (2) ponds into tanker trucks or lined and covered dumped trucks, and transport and disposal of soil at an approved, licensed, or permitted facility outside of the Buffalo River Watershed.
4. CONTRACTOR must secure disposal sites to be approved by DEQ and the ENGINEER, must furnish all labor, equipment, materials, tools, transportation, insurance, supervision, and all other items incidental thereto, and must perform all work necessary for the removal, transportation, and disposal of the waste liquid, waste solids, and 6” of pond soils.
5. The CONTRACTOR shall proceed with the work at such rate of progress to insure full completion within the required timeframe. It is expressly understood and agreed, by and between the CONTRACTOR and OWNER that the timeframe for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.
6. The two (2) ponds at C&H Hog Farm are earthen basins and are to be emptied, graded as shown on the plans, and vegetated.

B. Related Work Specified Elsewhere

1. Temporary Erosion and Sedimentation Control: Section 015680.
2. Clearing and Grubbing: Section 021000.
3. Site Grading: Section 022150.
4. Seeding: Section 029210.

1.02 REFERENCES

A. General

The work shall comply with the most recent standards or tentative standards as published at the date of the contract and as listed in this specification using the abbreviation shown.

1. DEQ: Waste Storage Pond Closure Guidelines
2. Regulation 5, Arkansas Pollution Control and Ecology Commission, Liquid Animal Waste Management Systems
3. Natural Resources Conservation Service, Conservation Practice Standard, Waste Facility Closure, Code 360 (State Specific)
4. Natural Resources Conservation Service, Conservation Practice Standard, Nutrient Management, Code 590 (State Specific)

1.03 SUBMITTALS

- A. Qualifications: CONTRACTOR must have all permits and licensure as required by local, State, and federal regulations and provide proof of such.
- B. General: Submittals shall be in accordance with Division I requirements. Copies of all required test results and field and office worksheets shall be furnished to the OWNER and/or ENGINEER within 48 hours after necessary tests are complete and analysis available.

1.04 QUALITY ASSURANCE

- A. Inclement Weather: When removal, transportation and disposal operations are ceased due to weather, the CONTRACTOR shall notify the ENGINEER.
- B. Inspection: The CONTRACTOR shall conduct daily inspections and more often if necessary to verify that the specifications are being met for the removal, transportation and disposal of waste liquids, waste solids, and soils.
- C. Coordination: The CONTRACTOR shall coordinate the work with the OWNER's Inspector by notifying the Inspector of scheduled work in advance. The CONTRACTOR shall coordinate work with other trades whose work will be affected on the site.
- D. Utilities: Prior to any excavation the CONTRACTOR shall verify the locations of all utilities which may be in the area. Providing for electricity and water is the responsibility of the CONTRACTOR.

1.05 PROJECT CONDITIONS

The facility's storage ponds consist of two (2) earthen waste storage ponds, Pond 1 and Pond 2.

- Pond 1 has an area of 18,700 square feet and an available storage volume of 761,034 gallons.
- Pond 2 has an area of 39,450 square feet and an available storage volume of 1,759,934 gallons.
- Waste from the CAFO operation flows to Pond 1, thence via a spillway, flows to Pond 2.
- Currently, liquid and solids from both ponds are pumped directly into land application equipment, and the waste is then land applied according to the facility Comprehensive Nutrient Management Plan (CNMP).
- The hog farm operation is to cease per the Agreement between C&H Hog Farm and the Department of Arkansas Natural Heritage and no later than February 3, 2020. Washdown from the buildings will be directed into Pond 1.
- The amount of waste that will be in the ponds at the time the CONTRACTOR is to begin the work is not known; it may be assumed that the ponds are to full. The CONTRACTOR will be paid on a unit price basis for the quantity of material processed.
- The latest analysis of the Ponds are as follows:

POND 1			POND 2		
pH	7.5		pH	7.9	
Ec(µmhos) 1:2	13,920		Ec(µmhos) 1:2	7,110	
% Solids	1.77	%	% Solids	0.76	%
Total N	1,520	mg/l	Total N	228	mg/l
Water Extractable P	88	mg/l	Water Extractable P	52	mg/l
Total P	1,492	mg/l	Total P	98	mg/l
Total K	1,384	mg/l	Total K	890	mg/l
Total Ca	1,219	mg/l	Total Ca	57	mg/l
N	12.7	lb/gal	N	1.9	lb/gal
Water Extractable P	0.7	lb/gal	Water Extractable P	0.4	lb/gal
P2O5	28.5	lb/gal	P2O5	1.9	lb/gal
K2O	13.9	lb/gal	K2O	9	lb/gal
Ca	10.2	lb/gal	Ca	0.5	lb/gal

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 REMOVAL OF WASTE AND SOIL

- A. Liquid Removal: Per NRCS Code 360 (State Specific), agitate and pump all liquid and

slurry wastes to the maximum extent practicable. Add water as necessary from Pond 2 to facilitate the agitation and pumping. The CONTRACTOR shall request approval from the ENGINEER for the addition of water external to the pond system

- B. Solids Removal: Per NRCS Code 360 (State Specific), remove sludge to the maximum extent practicable. During sludge removal operations, maintain the integrity of the existing clay liner. Stockpiling of solids if required during closure operations will be located between Ponds 1 & 2 and bermed to direct runoff only into the Ponds.
- C. Soils Removal: Per DEQ Waste Storage Pond Guidelines, remove a minimum of six (6) inches of soil from the bottom and inside levees of the pond. Stockpiling of soils if required during closure operations will be located between Ponds 1 & 2 and bermed to direct runoff only into the Ponds.
- D. Liquid Disposal: A sample of the fluids will be collected, analyzed as required for in-state land application, and submitted for approval of disposal method. The fluids are to be removed by the CONTRACTOR and delivered to a permitted, licensed, or approved land application site or permitted wastewater treatment facility. If a more economical solution is identified before the fluids are removed, DEQ will be notified of the change and the required approval of that solution will be requested. No fluids will be disposed of within the Buffalo River watershed. Temporary storage tanks may be installed at the ponds and/or the disposal facility to facilitate the closure operation.
- E. Solids and Soils Disposal: The accumulated solids will be removed by the CONTRACTOR and delivered to a permitted, licensed, or approved land application site or permitted Class 1 Landfill. The CONTRACTOR shall submit to the ENGINEER and DEQ how the waste solids and soils are to be dewatered in order to be accepted by landfill. The use of bulking agent(s) will be considered. If a more economical solution is identified before the solids and pond soils are removed, DEQ will be notified of the change and the required approval of that solution will be requested. No solids will be land applied within the Buffalo River watershed. Note: DEQ supports the use of the soils to be disposed of being used as landfill daily cover and/or fill but does not guarantee that the landfill will agree to use the soil as daily cover and/or fill. Landfills that may be used for disposal include but are not limited to:

Ozark Waste Management of AR, Inc.
10140 Ozark Ridge Access Lane
Danville Yell County

Eco-Vista, LLC
2210 Waste Management Drive
Springdale Washington County

Cherokee Landfill Corporation
300 Landfill Road
Cherokee Village Fulton County

- F. Land Application: Any waste disposal methods other than land application must be described in sufficient detail and include the final destination of the waste prior to receiving approval. If remaining waste will be land applied in-state, the following additional information is required to be provided to the ENGINEER and DEQ by the CONTRACTOR:

1. Legal description and identification of proposed waste application site.
2. Permit status of proposed waste application site
3. Solids content (%) of waste.
4. Plant Available Nitrogen (PAN) of waste.
5. Waste application rate.
6. Cover crop at waste application site and the corresponding nutrient uptake rate.
7. Total number of acres required for disposal of remaining waste.
8. Arkansas Phosphorus Index (API) if a site is located in the nutrient surplus area.

G. Record Keeping Requirements for Land Application: If land application is used, the following records are to be submitted to the ENGINEER and DEQ:

1. Truck hauling tickets showing hauler, name of disposal site destination, date, time leaving hog farm, time arriving at disposal site, volume of waste hauled, and name of driver with signature.
2. Expected crop yields;
3. The date(s) waste is applied to each field;
4. Weather conditions at time of application and for 24 hours prior to and following application;
5. Test methods consistent with University of Arkansas Extension recommendations used to sample and analyze waste and soil.
6. Results from waste and soil sampling;
7. Explanation of the basis for determining manure application rates, as provided in the technical standards established by the Director.
8. Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than waste, and calculation of the Arkansas Phosphorus Index (API) if in the nutrient surplus area;
9. Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;
10. The method used to apply the waste;
11. Date(s) of application equipment inspection.

H. Record Keeping Requirements for Landfill Disposal: If disposal of waste and/or soil is per landfill, the following records are to be submitted to the ENGINEER and DEQ:

1. Documentation of paint filter test for each batch of waste and/or soil.
2. Documentation of analytical results of waste and/or soil as required by the landfill.
3. Truck hauling tickets showing hauler, name of disposal site destination, date, time leaving hog farm, time arriving at disposal site, volume of waste hauled, and name of driver with signature.
4. Receipt from landfill for each truck load.

I. Record Keeping Requirements for Alternate Disposal: If disposal of waste and/or soil is achieved by means other than land application or landfill, the CONTRACTOR must not utilize such means until approved by the ENGINEER and DEQ, and until record keeping requirements are provided.

END OF SECTION

SECTION 021000 CLEARING AND GRUBBING

PART I – GENERAL

1.01 DESCRIPTION

A. Scope

This Section includes all clearing and grubbing Work indicated on the Plans and as required, complete with cutting and removal of trees, shrubs, vegetation, stumps, logs, brush, roots and undergrowth, and disposal of materials.

B. Related Work Specified Elsewhere

1. Measurement and Payment: Section 010250
2. General Earthwork: Section 022000
3. Site Grading: Section 022150

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION

3.01 EXECUTION OF WORK

A. General

1. Areas designated for improvements on the Plans shall be cleared of all trees, shrubs, vegetation, stumps, logs, brush, roots, buildings, pavement, concrete, and debris.

2. Clearing and Removal

Within areas for roadways, sidewalks, and parking areas where the finished grade is five (5) feet or less in height above the existing ground, trees, stumps, and roots shall be removed to a depth of not less than 12 inches below the existing ground. Within areas for roadways sidewalks, and parking areas, where the finished grade is more than five (5) feet in height above existing ground, trees and stumps shall be cut off flush with the existing ground surface. For embankment areas outside of the roadways, sidewalks, and parking areas, trees and stumps shall be cut off flush with the existing ground surface, or as indicated on the Plans or as directed by the OWNER.

Within areas designated for a building pad the trees, stumps, roots, vegetation and other debris shall be removed completely.

3. Removal of Trees, Stumps, and Other Vegetation

Where trees cannot be felled without danger to traffic or injury to other trees, structures or property, they shall be cut down in sections. The removal of stumps and roots may be accomplished by the use of a shredding machine meeting the approval of the OWNER.

All logs, stumps, poles, brush, and other unsatisfactory material occurring in the

Contract Limits shall be removed and shall be disposed of by the CONTRACTOR. When material is disposed of outside of the Contract Limits, disposal shall be as specified in Section 022000, General Earthwork.

Burial of materials is generally not permitted. The burial of trees, stumps and other vegetation will be permitted only if disposal areas are indicated on the Plans or directed by the OWNER. If trees and stumps are buried in these areas, they shall have a minimum cover of two (2) feet.

4. Holes and Trenches

All holes and trenches remaining after the grubbing operation in embankment areas shall have the sides broken down or leveled and shall be refilled with acceptable material. The material shall be moistened and properly compacted in layers by tampers or rollers to the density required under roadways, parking areas, and other special areas, as directed by the ENGINEER. The same construction procedure shall be applied to all holes and trenches remaining in excavation areas where the depth of holes exceeds the depth of proposed excavation.

END OF SECTION

SECTION 022000 GENERAL EARTHWORK

PART I – GENERAL

1.01 DESCRIPTION

A. Work Included

Excavate and grade in the areas designated in the Contract Documents as shown on the grading plan and specified herein, which shall include but not be limited to, the following:

1. Excavation and site preparation.
2. Grading to establish subgrades for slabs, walks, pavements, gravel surfaces, and grassed areas.
3. Excavation, filling and backfilling and compaction.
4. Dewatering or addition of water as required.
5. Placing of topsoil and finish grading.

B. Related Work Specified Elsewhere

1. Temporary Erosion and Sedimentation Control: Section 015680.
2. Clearing and Grubbing: Section 021000.
3. Site Grading: Section 022150.
4. Seeding: Section 029210.

1.02 REFERENCES

A. General

The work shall comply with the most recent standards or tentative standards as published at the date of the contract and as listed in this specification using the abbreviation shown.

1. American Society for Testing and Materials (ASTM):
 - 1) D 698 Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft)
 - 2) D 1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
 - 3) D 1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-

lbf/ft³)(2,700 kN-m/m³)

- 4) D 2167 Standard Test Method for Density and Unit Weight of Soil In Place by the Rubber Balloon Method
- 5) D 2216 Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- 6) D 2487 Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- 7) D 2922 Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
- 8) D 2937 Standard Test Methods for Density of Soil in Place by the Drive-Cylinder Method
- 9) D 3017 Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
- 10) D 4318 Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils

1.03 SUBMITTALS

- A. General: Submittals shall be in accordance with Division I requirements. Copies of all test results and field and office worksheets shall be furnished to the OWNER and/or ENGINEER within 48 hours after the tests are complete.
- B. Test Reports: The testing agency shall submit following reports, in duplicate, directly to OWNER and/or ENGINEER from the testing services, with copies to the CONTRACTOR.
 1. Test report on borrow material for soil classification.
 2. Field density reports and map of test location.
 3. One optimum moisture-maximum density curve for each type of soil used for controlled fill.
 4. Other reports of any testing hereinafter specified deemed necessary by the CONTRACTOR'S Geotechnical Engineer or requested by the OWNER.
 5. A test location plan shall be included with each submittal.

1.04 QUALITY ASSURANCE

- A. Geotechnical Engineer: The CONTRACTOR shall retain a licensed independent Geotechnical Engineer and Test Laboratory approved by the OWNER to insure that

earthwork meets the requirements of the specifications for density and moisture content. The Geotechnical Engineer shall attend the Pre-Construction Conference.

- B. Inclement Weather: When fill operations are ceased due to weather, construction shall not be resumed until the Geotechnical Engineer has verified soil strength has not been adversely affected. If soil strength has been decreased, the affected portion of fill shall be rescarified, moistened, or dried as required and recompacted to the specified density.
- C. Inspection: The CONTRACTOR shall conduct daily inspections and more often if necessary to verify that the specifications are being met for the installation of materials.
- D. Coordination: The CONTRACTOR shall coordinate the work with the OWNER's Inspector by notifying the Inspector of scheduled work in advance. The CONTRACTOR shall coordinate work with other trades whose work will be affected on the site.
- E. Utilities: Prior to any excavation the CONTRACTOR shall verify the locations of all utilities which may be in the area.
- F. Drainage: The CONTRACTOR shall be responsible for the proper drainage of the site during construction of the project. Water shall not be allowed to accumulate in any of the excavated areas. Storm or ground water collecting on site during construction shall be removed by dewatering per Construction Stormwater General Permit.

1.05 PROJECT CONDITIONS

A. Existing Utilities

Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.

1. Should uncharted, incorrectly charted, unmarked in field, or incorrectly marked in the field, piping or other utilities be encountered during excavation, CONTRACTOR shall consult utility owner immediately for directions. CONTRACTOR shall cooperate with OWNER and utility companies in keeping respective services and facilities in operation, and shall repair or arrange for repair, damaged utilities to satisfaction of utility owner.
2. CONTRACTOR shall demolish and completely remove existing underground utilities as indicated on the plans and shall coordinate with utility companies for shut-off of services if lines are active.

B. Protection of Persons and Property

Barricade open excavations occurring as part of this work and post with warning lights.

1. The CONTRACTOR shall operate warning lights as recommended by authorities having jurisdiction.
2. The CONTRACTOR shall protect structures, utilities, sidewalks, pavements, trees and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.
3. The CONTRACTOR shall protect, maintain and restore benchmarks, monuments, and other reference points affected by this work. If benchmarks, monuments or other permanent reference points are displaced or destroyed, points shall be re-established, and markers reset under supervision of a licensed Land Surveyor.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials: All fill materials shall be free from mud, refuse, construction debris, organic material, rock or gravel greater than 3 inches in any dimension, or otherwise unsuitable material. Materials for fills shall be secured from excavation after rejection of any unsuitable materials. Materials from other sources may be used upon approval by the Geotechnical Engineer. Fill materials in the uppermost 1 foot shall not have any rocks larger than 3 inches in diameter.
- B. Borrow: Material for use in replacing undercut areas or in construction of embankments shall be approved by the CONTRACTOR'S Geotechnical Engineer and obtained from approved sources.
- C. Unsuitable Materials: Areas that exhibit excessive pumping or that do not meet density requirements due to unsuitable material as determined by the CONTRACTOR'S Geotechnical Engineer shall be undercut and replaced with approved material in accordance with PART 3, EXECUTION.

PART 3 - EXECUTION

3.01 TOPSOIL

- A. Conservation of Topsoil: Topsoil shall be removed as required without contamination with subsoil and stockpiled convenient to areas for later application or at locations specified. Any surplus of topsoil from excavations and grading shall be stockpiled in location approved by the OWNER. A silt fence shall be installed on the downslope side and the stockpiles seeded.
- B. Placing Topsoil: On areas to receive topsoil, the compacted subgrade shall be scarified to a 2 inch depth for bonding of topsoil with subsoil. Topsoil then shall be spread evenly and graded to the elevations and slopes shown. Topsoil shall not be spread when excessively wet or dry. All areas disturbed by work in this project shall be seeded or hydroseeded in accordance with Section 029210 - Seeding.

3.02 EXCAVATION

- A. Excavation: After topsoil removal has been completed, excavation within the grading limits of the project shall be performed to the lines and grades indicated. Satisfactory excavation material shall be transported to and placed in fill areas within the limits of the work. All unsuitable material including any soil which is disturbed by the CONTRACTOR's operations and surplus material shall be disposed of at locations off site secured by CONTRACTOR and approved by the OWNER. Excavations carried below the depths indicated, shall, except as otherwise specified, be refilled to the proper grade with satisfactory material as directed. All additional work of this nature shall be at the CONTRACTOR's expense, unless otherwise provided for in the Bid Form. Excavation and filling shall be performed in a manner and sequence that will provide drainage at all times. Excavations shall be kept free from water while construction therein is in progress. If the CONTRACTOR fails to provide adequate drainage and any material becomes soft or otherwise unsuitable as a result, such material shall be removed and replaced with satisfactory on-site material or borrow material from approved sources, or shall be dried and recompacted as directed by the Geotechnical Engineer at no additional cost to the OWNER.
- B. Ditches, Gutters, and Channel Changes: Ditches, gutters, and channel changes shall be cut accurately to the cross sections and grades indicated. All roots, stumps, rock, and foreign matter in the sides and bottom of ditches, gutters, and channel changes shall be trimmed and dressed or removed to conform to the slope, grade, and shape of the section indicated. Care shall be taken not to excavate ditches and gutters below the grades indicated. Excessive ditch and gutter excavation shall be backfilled to grade either with compacted to specified densities material or with suitable stone or cobble to form an adequate gutter paving as directed. All ditches and gutters excavated under this section shall be maintained until final acceptance of the work. Satisfactory material excavated from ditches and channel changes shall be placed in fill areas. Unsuitable and excess material shall be disposed of in designated waste areas or as directed.
- C. Stability of Excavations: Maintain sides and slopes of excavations in a manner such that the excavation provides safety of personnel, protection of work, and compliance with requirements of governmental agencies having jurisdiction.

3.03 FILL

- A. Preparation of Ground Surface for Fill: All vegetation such as roots, brush, heavy sods, heavy growth of grass, and all decayed vegetative matter, rubbish, and other unsatisfactory material within the area upon which fill is to be placed, shall be stripped or otherwise removed before the fill is started. In no case will unsatisfactory material remain in or under the fill area. The areas shall then be scarified to a depth of at least 6 inches, moistened or aerated as required and compacted with vibratory rollers, pneumatic rollers, sheepsfoot rollers or other mechanical means acceptable to the Geotechnical Engineer. Sloped ground surfaces steeper than one vertical to four horizontal on which fill is to be placed shall be plowed, stepped, benched, or broken up, as directed, in such manner that the fill material will bond with the existing surface. Prepared surfaces on which compacted fill is to be placed shall be wetted or dried as may be required to obtain the specified moisture content and density.

- B. Fills and Embankments: Fills and embankments shall be constructed at the locations and to lines and grades indicated. The completed fill shall conform to the grading plan indicated. Approved material obtained during excavation may be used in forming required fill. Fill shall be satisfactory material and shall be free from roots, other organic material. Stones having a dimension greater than 3 inches shall not be permitted in the upper 1 feet of fill or horizontal embankment. The material shall be placed in successive horizontal layers of 8 inches in loose depth for the full width of the cross section and shall be compacted as specified. Each layer shall be compacted before the overlaying lift is placed. Moisture content of the fill or backfill material shall be adjusted by wetting or aerating as necessary to provide the moisture content specified.

3.04 COMPACTION

- A. Fill shall be placed and spread in layers. During spreading, each layer shall be thoroughly mixed as necessary to promote uniformity of material in each layer. Compaction shall be achieved by rolling so that the compacted layer shall be 8-inches compacted to 92% compaction per ASTM D1557 . In-place bulk density tests shall be done for each layer. Bulk densities shall be per the table below.
- B. Where the fill material moisture content is below the optimum moisture content, water shall be added before or during spreading until the moisture content is within +/- 2% points of optimum as determined by ASTM 02216.

Soil Texture (USDA)	Bulk Density (g/cm ³)
Sands, loamy sands	1.55 – 1.65
Sandy loams, loams	1.40 – 1.60
Sandy clay loams, loams, clay loams	1.40 – 1.50
Silts, silt loams	1.30 – 1.50
Silt loams, silty clay loam	1.10 – 1.50
Sandy clays, silty clays, some clay loams (35-45% clay)	1.10 – 1.40
Clays (>45% clay)	1.10 – 1.30

3.05 FINISHED GRADES

- A. General: All areas covered by the project, including excavated and filled sections and adjacent transition areas, shall be uniformly smooth-graded. The finished surface shall be reasonably smooth, compacted, and free from irregular surface changes. The degree of finish shall be that ordinarily obtainable from blade-grader operations, except as otherwise specified. Ditches and gutters shall be finished to permit adequate drainage.

- B. Unsatisfactory Material: Soft or otherwise unsatisfactory material shall be replaced with satisfactory excavated material or other approved materials.
- C. Finished Elevations: Low areas resulting from removal of unsuitable material or from excavation of rock shall be brought up to required grade with satisfactory materials, and the entire area shall be shaped to line, grade, and cross section and shall be compacted as specified. The surface of embankments or excavated areas for road construction or other areas on which a base course or pavement is to be placed shall vary not more than 0.10 feet from the established grade and approved cross section. Surfaces other than those to be paved shall be finished not more than 0.20 feet above or below the established grade or approved cross section.

3.06 PROTECTION

- A. Site Preservation: The CONTRACTOR shall protect newly graded areas from traffic and from erosion, and any settlement or washing away that may occur from any cause, prior to acceptance, shall be repaired and grades reestablished to the required elevations and slopes. All work shall be conducted in accordance with the Erosion Control provisions of these specifications.
- B. Seeding: All areas disturbed by work in this project shall be seeded or hydroseeded in accordance with Section 029210 - Seeding.

3.07 FIELD QUALITY CONTROL

- A. Testing: Testing shall be the responsibility of the CONTRACTOR and shall be performed by an approved commercial testing laboratory qualified to perform such tests and approved by ENGINEER. Tests conforming to ASTM D 698, shall be made by the Geotechnical Engineer or his representative on each soil type found in the areas prepared to receive fill and in the soil to be used for fill. Field Density tests shall be made by the Geotechnical Engineer or his representative in accordance with ASTM D 1556 or ASTM D 2922 and ASTM D 3017 on the areas prepared to receive fill and on each layer of compacted fill. Testing shall be the responsibility of the CONTRACTOR and shall be performed at no additional cost to the OWNER. When ASTM D 2922 is used, the calibration curves shall be checked and adjusted if necessary by the procedure described in ASTM D 2922, paragraph "ADJUSTING CALIBRATION CURVE". ASTM D 2922 results in a wet unit weight of soil and when using this method, ASTM D 3017 shall be used to determine the moisture gauges along with density calibration checks as described in ASTM D 3017. ASTM D 2937 shall be used only for soft, fine-grained, cohesive soils. At least one test shall be performed on the compacted backfill. More tests shall be performed if, in the judgment of the OWNER'S Inspector or OWNER, the compactive effort of the CONTRACTOR will not result in the specified density.
- B. Testing Frequency: The following submittals are required.
 - 1. A minimum of one moisture-density test shall be performed for each classification of fill material, and existing subgrade material.

2. One Atterberg limits test and one gradation analysis is required for every six field density tests.
 3. Field density tests shall be performed as follows: a minimum of one test per lift per 5,000 square feet or fraction thereof is required for fill material and a minimum of one test per lift per 5,000 square feet or fraction thereof is required for subgrades prior to filling.
- C. Visual Inspection: Upon completion of all excavation of unsuitable material, the Geotechnical Engineer shall visually inspect the subgrade and excavations. The visual inspection shall be conducted to assure that the data obtained from the test borings and used as a basis of design was representative of the site conditions. Upon completion of the inspection, the Geotechnical Engineer shall provide written notification to the OWNER.
- D. Proof Rolling: Following visual inspection, CONTRACTOR shall demonstrate to the Geotechnical Engineer that the exposed subgrade does not contain previously unidentified soft areas by proof rolling. Proof rolling shall consist of rolling the entire surface with approved mechanical equipment while observing the subgrade for displacement or deformation.

END OF SECTION

SECTION 022150 SITE GRADING

PART I – GENERAL

1.01 DESCRIPTION

A. Scope

This Section includes site grading as indicated on the Plans, complete with removing and salvaging topsoil, rough grading and finish grading.

B. Related Work Specified Elsewhere

1. Measurement and Payment: Section 01025
2. Clearing and Grubbing: Section 02100
3. General Earthwork: Section 02200

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION

3.01 PERFORMANCE

A. Site Grading

Sites shall be graded as specified on the Plans or as directed by the ENGINEER. The CONTRACTOR shall carry out the grading operation to prevent standing water and soil saturation detrimental to structures and improvements. Provisions shall be made to preserve and protect trees and other vegetation specified on the Plans or directed by the ENGINEER not to be removed.

B. Rough Grading

The site shall be graded as necessary to comply with the Plans or as directed by the ENGINEER. The subgrade shall be roughly established by cut or fill, approximately parallel to proposed finished grades and to elevations which allow for thickness of topsoil and installation of site or roadway improvements.

In fill areas all debris shall be removed from the area to be filled. All material detrimental to site improvement shall be removed from the site and acceptably disposed of as specified in General Earthwork, of the Specifications.

Original ground on sloping sites shall be scarified and benched or otherwise treated to provide adequate bond and to prevent slippage of fill.

Fill material shall be free of debris or other detrimental material and shall have a reasonable moisture content when placed. Compaction shall be achieved by rolling so that the compacted layer shall be 8-inches compacted to 92% compaction per ASTM D1557 .

C. Finish Grading

The subgrade shall be smoothed parallel to proposed finished grades and elevations

specified on the Plans. The subgrade shall be scarified to assure bond with the topsoil prior to spreading of the topsoil.

The topsoil shall be spread uniformly to provide a smooth, even surface at a finish grade specified on the Plans or acceptable to the ENGINEER. Topsoil shall be spread only after the ENGINEER has approved the subgrade. After spreading, the topsoil shall be compacted lightly as necessary to minimize settlement. Final grades shall not vary more than 1/10 of a foot from the elevations indicated on the Plans.

END OF SECTION

SECTION 022400 SODDING

PART I – GENERAL

1.01 DESCRIPTION

A. Scope

This Section includes sodding complete with earth bed preparation, providing and placing topsoil, compacting and finishing topsoil, furnishing and placing sod, furnishing and placing stakes, watering sod, rolling and tamping sod, mowing sod, replacing defective or deteriorated sod and maintenance and care of sod in place.

B. Related Work Specified Elsewhere

1. Measurement and Payment: Section 010250
2. General Earthwork: Section 022000
3. Site Grading: Section 022150

1.02 QUALITY ASSURANCE

A. Requirements of Regulatory Agencies

1. State Department of Agriculture

Comply with the applicable requirements of the Arkansas Pesticide General Permit and with Federal Environmental Pesticides Control Act of 1972.

1.03 SUBMITTALS

A. Growers Certificate

Where applicable, submit copies of Sod Growers Certificate to the ENGINEER indicating nursery from which sod was taken, grass species and percentage in accordance with the Arkansas Pesticide General Permit and with Federal Environmental Pesticides Control Act of 1972. Type of sod is to be as recommended by the Cooperative Extension Service.

B. Topsoil Borrow Pit Agreements

When requested by the ENGINEER, submit evidence of topsoil borrow pit agreement for pits used by the CONTRACTOR.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Delivery of Materials

Sod shall be delivered to the project site on suitably approved wooden pallets. Sod shall be delivered in manageable squares and the amount of sod delivered shall not exceed that which can be installed in one (1) 24-hour period. Sod that has been damaged during delivery will be rejected.

B. Storage

Store sod in such a manner as to protect roots and grass material from exposure to wind and sunlight, freezing or other injury. Sod shall be kept moist during storage, under shade or covered with moistened burlap. Sod that has been damaged or has deteriorated because of storage will be rejected.

C. Handling

Sod shall be handled in a manner to prevent breaking or other damage. Sod shall not be handled by pitch forks or by dumping from trucks or other vehicles. Care shall be taken at all times to retain the native soil on the roots of each sod roll during stripping and handling. Sod that has been damaged by handling will be rejected.

1.05 JOB CONDITIONS

A. Environmental Requirements

1. Soil Moisture Conditions for Sod Cutting

Perform sod cutting and removal during soil moisture conditions as specified under paragraph 3.02.B below.

2. Seasonal Limitations

Sod shall not be placed during drought, unless directed by the ENGINEER.

3. Temperature Limitations

Sod shall not be placed when the ambient air temperature is below 32 degrees F.

B. Protection

1. Signs and Barricades

Provide suitably approved warning signs and barricades for protection of new sodding from pedestrian or vehicular traffic. Protect all newly sodded areas during the progress of the Work and until the completion of the turf establishment period.

2. Adjacent Construction

Protect all adjacent construction from topsoil spills and perform such cleanup of affected surfaces before it becomes compacted by traffic.

C. Planting Schedule

The CONTRACTOR will be required to have a minimum of 90% of the sod placed at least one (1) month prior to final acceptance of the complete Project to insure adequate rooting of the sod.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Sod

1. General

Dense, well-rooted growths of the species and type indicated on the plans indigenous to the general locality where it is proposed for use, free of noxious weed, relatively free of weeds and undesirable plants, in general, large stones, roots and other material which might be detrimental to the growth, development or future maintenance of the sod.

Type of sod is to be as recommended by the Cooperative Extension Service.

2. Nursery Sod

Nursery sod, where used, shall have been grown in a prepared seed bed and regularly fertilized and maintained according to established practices for at least two (2) years before cutting.

3. Field or Salvage Sod

Salvage sod existing on areas to be disturbed in construction or field grown sod meeting the requirements of paragraph 2.01.A.1 of this Section shall be used as indicated on the Plans or as directed by the ENGINEER.

4. Harvest Heights

Sod shall be of uniform height when harvested. Vegetation more than five (5) inches in height shall be mowed to a height of three (3) inches or less. When the sod is harvested (cut), the height of the grasses shall be as follows:

Field Grown Sod - 2 to 3 inches

Nursery Grown Sod - 1 to 2 inches

5. Harvest Thickness

Sod when harvested shall have the following average thickness:

Field Grown Sod - 2 inches

Nursery Grown Sod - 1 inch

B. Topsoil

Topsoil shall be the top 12 inches or less of soil taken from the top of the natural and undisturbed ground level and shall be a loam containing a sufficient amount of organic matter to attain proper texture. Topsoil shall be free of undesirable grasses, weed roots or other unsuitable material. All topsoil shall be subject to acceptance by the ENGINEER. The CONTRACTOR shall obtain his own topsoil borrow pit source and shall obtain all necessary permits and agreements for the use of such borrow pits at his own expense.

PART 3 – EXECUTION

3.01 CONTRACTORS VERIFICATION

A. Earth Bed

Prior to placing any topsoil, verify that earth bed in areas to receive sod have been completely stabilized to prevent settling and that grades have been made smooth, uniform and parallel to the finished grades and cross sections shown on the Plans. Ascertain that the tops and bottoms of all slopes are rounded off to form vertical curves and have been found acceptable to the ENGINEER. Do not place topsoil until all earth bed conditions are accepted.

B. Topsoil

Prior to placing sod, verify that topsoil has been placed on the prepared earth bed to the proper depths shown on the Plans and as specified herein. Do not place any sod until topsoil conditions are satisfactory.

3.02 PREPARATION

A. Off-Site Source Inspection

Prior to commencement of sodding operations, notify the ENGINEER of the off-site sources from which sod is to be furnished. The ENGINEER, at his discretion, will inspect the sod at the off-site source.

B. Sod Harvesting

Sod shall be harvested by cutting into squares or into rectangular sections. The rectangular sections may vary in length, but shall be of equal width and of a size that will permit them to be lifted and rolled without breaking. During the stripping process and all other handling of the sod, care shall be taken to retain the native soil on the roots. Where off-site source inspection of sod is required by the ENGINEER, no sod shall be harvested until such inspection is complete and sod is accepted. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. When the soil is too dry, permission to cut sod may be granted by the ENGINEER only after it has been sufficiently watered to moisten the soil to the depth at which the sod is to be cut.

C. Preparation of Subgrade

Complete all fine grading within the areas to be covered with topsoil as necessary to bring the surface of the proposed subgrade to the elevations indicated on the Plans and parallel to the proposed finished grade. The surface of the subgrade, immediately prior to being covered with topsoil, shall be raked or otherwise loosened to a minimum depth of two (2) inches to facilitate making a bond between the subsoil and the topsoil.

3.03 INSTALLATION

A. Topsoil

1. Placing and Spreading Topsoil

Topsoil shall be placed and spread over the area indicated on the Plans or as directed by the ENGINEER. Topsoil shall be placed to a depth of three (3) inches, plus or minus

1-inch, unless otherwise indicated on the Plans. At a minimum, topsoil placed shall be sufficiently greater than that shown on the Plans so that, after natural settlement or rolling, the completed Work will conform to the lines, grades and elevations indicated on the Plans.

2. Finishing Topsoil

After spreading topsoil, all large lumps, rocks, roots, debris or other foreign matter shall be removed from the topsoil by raking and disposed of off the site of the Work. Spreading shall be completed in such a manner that sodding operations can proceed without additional moving of topsoil. Topsoil furnished and placed shall be incidental to the sodding operations.

B. Sodding

1. Placing

Sod shall be laid within 24 hours after cutting and shall be properly protected during handling and placing. Sod shall be lifted from trucks or storage piles and placed on a moist earth bed by hand, making close joints without overlapping. All gaps between sections of sod and openings at angles shall be plugged with sod. When placing sod on slopes, the Work shall begin at the base of the slope and progress upward by carefully placing the sod on the smooth slope, in rows, with the lengths running at right angles to the slope. The transverse joints of sod strips shall be staggered and the sod carefully laid to produce tight joints. When the top of slopes are reached, the sod shall be carried back at least two (2) feet over the crest and trimmed to a line which is parallel to the top of the bank. The areas back of the crest shall have been previously graded and the surface of the sod, when placed, shall be two (2) inches below the level of this area and covered with a layer of topsoil at least two (2) inches in depth and thoroughly compacted in a manner that will conduct the surface water from runoff over the edge of the sod. No frozen sod shall be laid nor shall sod be laid on frozen soil.

2. Rolling

Rolling of the sod shall be done after initial watering and after the water has sufficiently soaked into the ground so that distortion of the sod surface and excessive compaction of the sod and the soil will not occur. The roller used shall be a water filled type at least three (3) feet wide and 30 inches in diameter and shall weigh approximately 300 pounds. Roller shall be adequate to cause sod to make firm contact with the soil. A tamper, acceptable to the ENGINEER, shall be used to press the sod firmly in place in areas not accessible to a roller. After tamping or rolling, the sod shall present a smooth, even surface, free from bumps or depressions.

3. Defective Materials

Damaged, deteriorated or otherwise defective sod will be rejected by the ENGINEER. Sod which has been permitted to dry out or become otherwise injured during transportation handling, storage or placing will be rejected. Where permitted by the ENGINEER, rejected sod, if suitable, may be pulverized and used for filling, where necessary.

C. Turf Establishment

1. Watering

After laying, the sod shall be watered until saturated. Sod shall be watered whenever excessive drying is evident during the period set for establishment. Sufficient water shall be applied to wet the sod through completely and to wet at least two (2) inches of the sod bed each time watering is required. Watering shall be done in a manner that will prevent erosion due to the application quantities of water. The watering equipment shall be of a type that will prevent damage to the finished surfaces of topsoil and sod. The sod shall be watered as required until firmly knit in place and in a vigorous growing condition.

2. Mowing

The sodded areas shall be mowed a minimum of three (3) times with mowing equipment acceptable to the ENGINEER. Sod shall be mowed to a height of two (2) inches whenever the average height of the grass becomes four (4) inches. When the amount of cut grass is heavy, the cuttings shall be removed from the sodded areas to prevent destruction of the underlying turf. Where weeds or other undesirable vegetation threaten to smother the planted species, such vegetation shall be mowed or, in the case of rank growths, uprooted, raked and removed from the area. All mowed cuttings, uprooted or raked vegetation, shall be legally disposed of away from the Project Site.

3. Establishment Period

The establishment period shall extend for a period from the time of sodding until the sodded area have received final acceptance of the entire Work covered by the Contract. The minimum period shall be 30 days.

END OF SECTION

**SECTION 022700
EROSION AND SEDIMENTATION CONTROL**

PART 1 – GENERAL

1.01 SECTION INCLUDES

Designing, providing, maintaining, and removing temporary erosion and sedimentation controls.

1.02 OWNER'S INSTRUCTIONS/SEQUENCING

- A. The OWNER has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, trenching, borrow and embankment operations. The OWNER also has authority to direct the CONTRACTOR to provide immediate permanent or temporary erosion and sediment control measures.
- B. The CONTRACTOR shall respond to erosion and sediment control maintenance requirements or implement additional measures to control erosion ordered by the OWNER or governing authorities within 48 hours or sooner if required at no additional cost to the OWNER.
- C. The CONTRACTOR will be required to incorporate permanent erosion control features into the Project at the earliest practical time to minimize need for temporary controls.

1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. SWPPP and NPDES Requirements: Section 010610.
- B. Temporary Erosion and Sedimentation Control: Section 015680.

PART 2 – PRODUCTS

2.01 EROSION CONTROL

- A. Seeding and Mulching
- B. Sodding
- C. Hydro-seeding
- D. Coarse Aggregate

2.02 SEDIMENTATION CONTROL

- A. Silt Fence
- B. Vegetative Buffers
- C. Rock Check Dams
- D. Fiber Rolls/Straw Wattles, AEC Premier Straw Wattles or Equal

PART 3 – EXECUTION

3.01 EROSION CONTROL

- A. Maintain temporary erosion control systems as directed by the OWNER or governing authorities to control erosion and siltation during life of contract.

- B. Permanently sod cut slopes as excavation proceeds to extent considered desirable and practical.
- C. Grass all disturbed areas within 7 days of initial disturbance. Temporary sodding to be placed where slopes are steeper than 3:1. Temporary grassing can be seed and mulch or hydromulch at all other locations unless otherwise indicated in the drawings or specifications.
- D. Final erosion control of areas to be vegetated shall meet the following:
 - 1. The CONTRACTOR shall certify that the subgrade has been properly compacted, graded smooth, has no depressions, voids, soft or uncompacted areas, is free from obstruction such as tree roots, protruding stones or other foreign matter.
 - 2. Install and maintain fertilizer and sod on all disturbed and graded areas per Specification 022400, Sodding and as recommended by the Cooperative Extension Service.
- E. Dirt roads are to be stabilized and compacted within 7 days of the completion of trenching and grading activities.

3.02 SEDIMENTATION CONTROL

- A. Install prior to construction.
- B. Inspect weekly during construction.
- C. Remove any sediment build-up.
- D. Repair and reinstall any damaged or missing sediment control measures. Install additional measures if inspection reveals additional sedimentation control is necessary.
- E. Rough excavate and grade any proposed stormwater ponds at the start of site grading activities. Direct site runoff to the ponds to minimize runoff to offsite areas.

END OF SECTION

SECTION 029210 SEEDING

PART I – GENERAL

1.01 DESCRIPTION

A. Scope

Furnish and install lime, fertilizer, seed, hydroseed, mulch, and water on disturbed areas on the site, in strict accordance with this Section. Work in this section includes permanent sodding and, when required, temporary seeding.

B. Related Work Specified Elsewhere

1. Measurement and Payment: Section 010250
2. SWPPP and NPDES Requirements: Section 010610.
3. Temporary Erosion and Sedimentation Control: Section 015680.
4. General Earthwork: Section 022000.
5. Erosion and Sedimentation Control: Section 022700.

1.02 QUALITY ASSURANCE

A. Field Samples

1. Seed samples will be taken 30 days before sowing and sent for testing. Test analysis will indicate species, purity, percent of germination, and weed content. Results will be sent directly to the ENGINEER for acceptance or rejection based on these tests. The CONTRACTOR will be responsible for all expenses incurred for testing.

1.03 SUBMITTALS

- ##### A. Product Data; Manufacturer's specifications and application rate.

1.04 PRODUCT DELIVERY AND STORAGE

A. Delivery of Materials

1. Fertilizer will be delivered in waterproof bags or cartons showing weight, analysis, and the name of the manufacturer. Type of fertilizer is to be as recommended by the Cooperative Extension Service.
2. Seeds will be delivered 30 days in advance of anticipated use, in vendor's unopened packages bearing labels showing vendor's name and seed analysis by weight.
3. Deliver grass hydroseed mixture in sealed containers. Seed in damaged packaging is not acceptable

4. Erosion control blanket/mat will be delivered in manufacturer's standard packing material, showing the name of the manufacturer.

B. Storage

Store all seed and other materials at the site in a cool dry place as approved by OWNER and recommended by the manufacturer. The CONTRACTOR will be responsible for replacing any seed damaged due to poor storage conditions at no additional cost to the OWNER.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Fertilizer

1. General

Spread the fertilizer over the grassed area four to five weeks after the grass seeds germinates in one or more applications as recommended by the Cooperative Extension Service.

The CONTRACTOR may spread the fertilizer by hand in areas where machine-spreading may not be practicable.

B. Seed

1. General

The types of seed and their mixture will be as recommended by the Cooperative Extension Service. The separate types of seed used shall be thoroughly dry mixed immediately before sowing. All seed shall meet the requirements of all applicable State laws, and shall be approved by the ENGINEER before being sown. The seed shall have been harvested from the previous year's crop. All seed bags shall have a label attached stating the date of harvest, LOT number, percent purity, percent germination, noxious weed certification and date of test. All quantities of seed specified shall be for pure live seed. It is the responsibility of the CONTRACTOR to calculate and apply the actual pure live seed poundage based on the label attached to each bag of seed.

Shipping tickets shall indicate both pure live seed weight and bulk weight for

each species. When a low percentage of grass seed or wildflower seed germination causes the quality of the seed to fall below the minimum pure live seed percentage (the product of pure seed and germination) as specified below, the Contractor may elect, subject to the approval of the ENGINEER, to increase the rate of application sufficiently to obtain the minimum germination rate specified. No payment will be made for the added seed.

2. Grass Seed and Hydroseed

Each of the species or varieties of seed shall be furnished and delivered in separate labeled bags. During handling and storing, the seed shall be cared for in such a manner that it will be protected from damage by heat, moisture, rodents and other causes. All temporary grass seed shall have been tested within a period of six months of the date of planting. All permanent sod and temporary grass seed shall have a minimum percent of purity and germination as recommended by the Cooperative Extension Service.

C. Mulch

The mulch material shall be dry straw or hay, consisting of oat, rye, or wheat straw, or of pangola, peanut, bermuda or bahia grass, hay or compost; and shall be free from noxious weeds and plants. Any plant officially listed as being noxious or undesirable by any Federal Agency, any agency of the State of Arkansas or any local jurisdiction in which the project is being constructed shall not be used. Furnish to the Engineer, prior to incorporation onto the project, a certification stating that the Mulch materials are free of noxious weeds. Any such noxious plant or plant part found to be delivered as mulch will be removed by the Contractor at his expense and in accordance with the law.

Only undeteriorated mulch which can readily be cut into the soil shall be used. The "air-dry" weight (as defined by the Technical Association of the Pulp and Paper Industry, for wood cellulose) shall be marked on each package by the producer.

D. Fertilizer

Commercial grade; recommended for grass; of proportion necessary to eliminate deficiencies of topsoil, as indicated by topsoil testing, to the following proportions: Nitrogen 30 percent, phosphoric acid 30 percent, soluble potash 30 percent.

PART 3 – EXECUTION

3.01 PREPARATION

A. Seed Bed

1. Scarify soil to a depth of 3 inches in compacted areas. Smooth out unsightly variations, bumps, ridges, and depressions which will hold water. Remove stones, litter, or other objectionable material.
2. Obtain written approval of seed bed from the OWNER before commencing seeding operations.

3.02 Seeding

While the soil is still loose, scatter the seed uniformly over the grassing area and immediately mix it into the seed bed to a depth of ¼ inch using the specified seed. Thoroughly dry-mix the separate seed type of seed immediately before sowing. Do not use wet seed.

3.03 Hydroseeding

Apply fertilizer, mulch and seeded slurry with hydraulic seeder at rate of 5 lbs per 1000 sq ft evenly in one pass. After application, apply water with fine spray immediately after each area has been hydroseeded. Saturate to 4 inches of soil and maintain moisture levels two to four inches.

3.04 Mulching

When areas require mulch, apply approximately 2 inches, loose thickness, of the mulch material uniformly over the seeded area, and cut the mulch material into the soil to produce a loose mulched thickness of 3 to 4 inches. Do not use harrows. When mulching on steep slopes, where the use of a machine for the cutting-in process is not practicable, secure the mulch after the seeding operation by either using an erosion control fabric, or; spread a string net over the mulch using stakes driven flush with the top of the mulch at 6 foot centers and string parallel and perpendicular with diagonals in both directions.

3.05 Rolling

Immediately after seeding, roll the entire grassed or mulched area with a cultipacker, traffic roller or a horticultural roller. Make at least two passes over the entire area.

3.06 Watering

Provide a vehicle for applying water to the grassed areas equipped with either a calibrated tank or an approved metering device installed at such point on the vehicle to measure the water at time of application. Do not water newly seeded areas to force the seed germination. Do not apply more than 1 inch of water per week for sustaining the grass growth.

3.07 Fertilizer

See Paragraph 2.01.A in this Section.

3.08 Seed and Hydroseed Protection

Cover temporary seeded slopes with mulch.

3.09 Lawn Establishment

- A. Maintain the grass sod at heights between 2-1/2 inches and 3-1/2 inches on a weekly basis until the physical completion of the Work.
- B. Water and protect all seeded areas until final acceptance of the lawn.

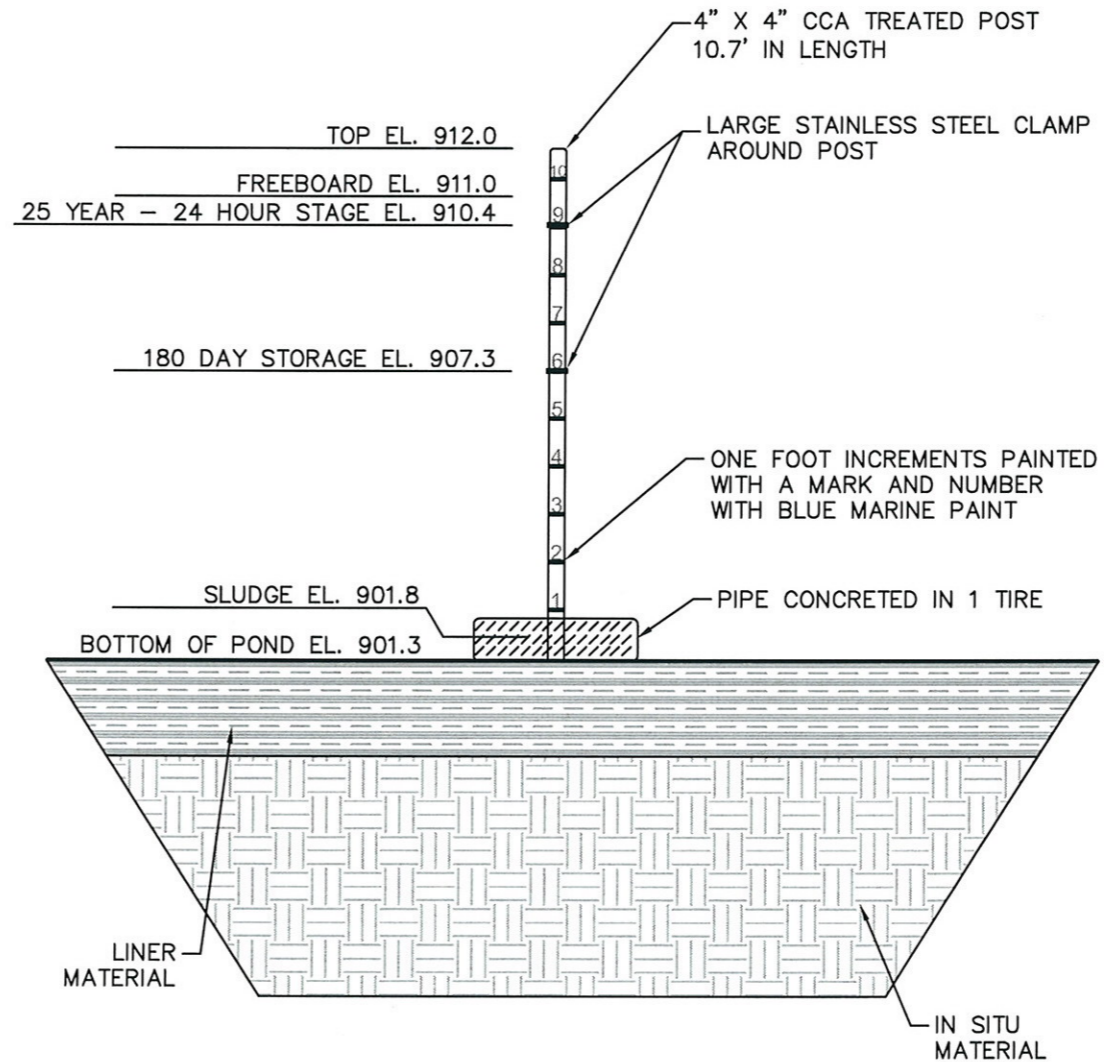
3.10 Final Acceptance

- A. Final acceptance of lawn areas will be granted when a uniform stand of acceptable grass sod is obtained, with a minimum of 95 percent coverage. Portions of the areas may be accepted at various times at the discretion of the OWNER.
- B. Unacceptable lawn areas: Re-sod as specified and fertilize at one-half the specified rate and per the Cooperative Extension Service.
- C. At the physical completion of the Work, the OWNER will arrange for maintenance responsibilities of the lawn areas.

END OF SECTION



The drawing is believed to be correct to the best of the professional's knowledge but it cannot be guaranteed accurate.

Waste Storage Pond 1 Stage Storage Table						
Elevation	Stage	Area	Volume	Cum. Volume	Cum. Volume	
(ft)	(ft)	(ft ²)	(ft ³)	(ft ³)	(acre-feet)	
912.0	10.7	20,153	28,793	118,918		Top
911.0	9.7	17,130	19,227	100,065	2.3	Freeboard
910.4	9.1	15,838	16,603	90,125	2.1	25 Year-24 Hour Stage/Overflow El.
909.8	8.5	14,915	7,316	80,838	1.9	
909.3	8.0	14,349	6,946	73,522	1.7	
908.8	7.5	13,435	6,585	66,576	1.5	
908.3	7.0	12,905	6,235	59,991	1.4	
907.8	6.5	12,035	5,898	53,756	1.2	
907.3	6.0	11,557	5,570	47,858	1.1	180 Day Stage
906.8	5.5	10,723	5,253	42,288	1.0	
906.3	5.0	10,289	4,947	37,035	0.9	
905.8	4.5	9,499	4,648	32,088	0.7	
905.3	4.0	9,093	4,360	27,440	0.6	
904.8	3.5	8,347	4,079	23,080	0.5	
904.3	3.0	7,969	3,808	19,001	0.4	
903.8	2.5	7,263	3,524	15,193	0.3	
903.3	2.0	6,833	3,294	11,669	0.3	
902.8	1.5	6,343	3,060	8,375	0.2	
902.3	1.0	5,897	2,837	5,315	0.1	
901.8	0.5	5,451	2,478	2,478	0.1	Sludge El.
901.3	0.0	0	0	0	0.0	Bottom



WASTE STORAGE POND 1

GENERAL NOTES

-  INSITU MATERIAL
-  CLAY LINER

SCALE, FEET



No.	Revision/Issue	Date
1	As Built	4/1/13

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C & H HOG FARMS
GESTATION-FARROWING FARM

SECTION 26, T 15 N, R 20 W
NEWTON COUNTY, AR

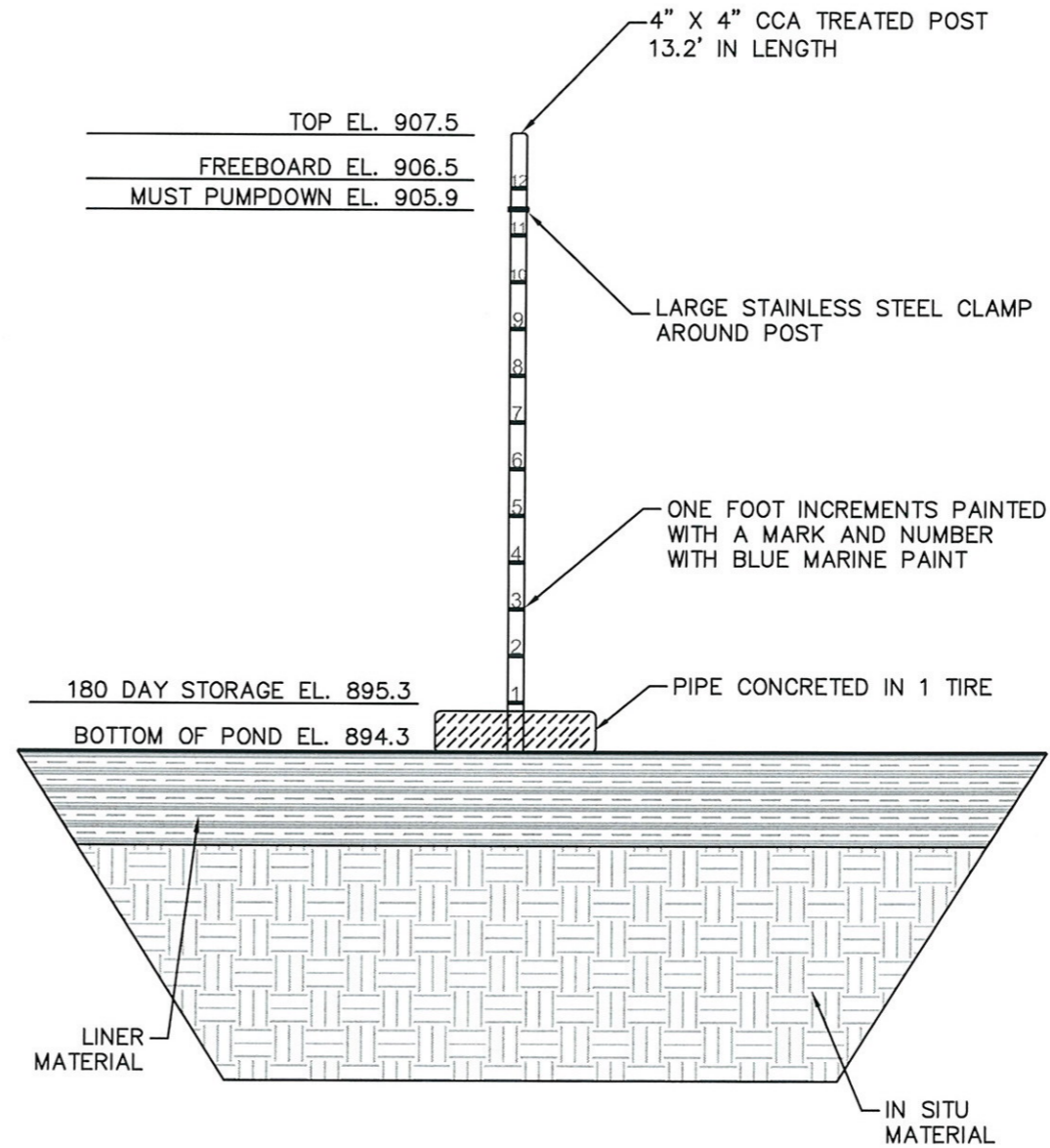
WASTE STORAGE POND 1
STAGE STORAGE TABLE

DATE: MAY 30, 2012	SHEET: 14
SCALE: 1" = 4'	
DRAWN BY: CAS	
CHECKED BY: DLD	

The drawing is believed to be correct to the best of the professional's knowledge but it cannot be guaranteed accurate.

Waste Storage Pond 2 Stage Storage Table

Elevation (ft)	Stage (ft)	Area (ft ²)	Volume (ft ³)	Cum. Volume (ft ³)	Cum. Volume (acre-feet)	
907.5	13.2	32,950	16,166	246,200	5.7	Top
907.0	12.7	31,714	15,536	230,034	5.3	
906.5	12.2	30,430	17,828	214,498	4.9	Freeboard
905.9	11.6	28,996	16,963	196,670	4.5	25 Year-24 Hour Stage/Must Pumpdown
905.3	11.0	27,547	13,488	179,707	4.1	
904.8	10.5	26,405	12,914	166,219	3.8	
904.3	10.0	25,251	12,353	153,305	3.5	
903.8	9.5	24,161	11,805	140,952	3.2	
903.3	9.0	23,059	11,270	129,147	3.0	
902.8	8.5	22,021	10,755	117,877	2.7	
902.3	8.0	20,999	10,261	107,122	2.5	
901.8	7.5	20,045	9,786	96,861	2.2	
901.3	7.0	19,099	9,332	87,075	2.0	
900.8	6.5	18,229	8,894	77,743	1.8	
900.3	6.0	17,347	8,467	68,849	1.6	
899.8	5.5	16,521	8,049	60,382	1.4	
899.3	5.0	15,675	7,640	52,333	1.2	
898.8	4.5	14,885	7,239	44,693	1.0	
898.3	4.0	14,071	6,848	37,454	0.9	
897.8	3.5	13,321	6,464	30,606	0.7	
897.3	3.0	12,535	6,088	24,142	0.6	
896.8	2.5	11,817	5,638	18,054	0.4	
896.3	2.0	10,735	5,060	12,416	0.3	
895.8	1.5	9,505	4,240	7,356	0.2	
895.3	1.0	7,455	2,565	3,116	0.1	180 Day Stage
894.8	0.5	2,805	551	551	0.0	
894.3	0.0	0	0	0	0.0	Bottom

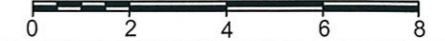


WASTE STORAGE POND 2

GENERAL NOTES

- INSITU MATERIAL
- CLAY LINER

SCALE, FEET



No.	Revision/Issue	Date
1	As Built	4/1/13

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SECTION 26, T 15 N, R 20 W
 NEWTON COUNTY, AR

**WASTE STORAGE POND 2
 STAGE STORAGE TABLE**

DATE: MAY 30, 2012	SHEET: 15
SCALE: 1" = 4'	
DRAWN BY: CAS	
CHECKED BY: DLD	