## SECTION 00 0101 PROJCT TITLE PAGE

2017:35 COMPLEX 4 CONCESSION BUILDING JOE MACK CAMPBELL PARK

CITY OF JONESBORO
PARKS & RECREATION
3009 DAN AVENUE
JONESBORO, ARKANSAS 72401

ARCHITECT'S PROJECT NUMBER: F10472

END OF PROJECT TITLE PAGE

## SECTION 00 0107 SEALS PAGE

(CITY PROJECT NUMBER)
CITY OF JONESBORO
PARKS & RECREATION

COMPLEX 4 CONCESSION BUILDING
JOE MACK CAMPBELL PARK
3021 DAN AVENUE
JONESBORO, ARKANSAS 72401



"I, HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW, AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

(0.0...)

Howard

**END OF SEALS PAGE** 

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(not used)

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(not used)

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(not used)

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(not used)

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(not used)

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(not used)

**END OF SECTION** 

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## SECTION 00 0115 LIST OF DRAWINGS

SHEET NUMBER	SHEET TITLE
G000	COVER
G001	ABBREVIATION – CODE INFORMATION – INDEX SHEET
C100	EXISTING CONDITIONS PLAN
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A101	FLOOR PLAN, ENLARGED PLANS, RCP
A102	ROOF PLAN, DOOR & WINDOWS ELEVATIONS, SCHEDULES
A200	BUILDING ELEVATIONS & BUILDING SECTIONS
A300	WALL SECTIONS & DETAILS
A400	DETAILS
A500	INTERIOR ELEVATIONS & DETAILS
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E105	SITE PLAN - ELECTRICAL
E200	FLOOR PLAN - LIGHTING
E300	FLOOR PLAN – POWER & AUXILIARY
E400	ROOF PLAN – ELEC. CONN. TO MECH.

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## SECTION 00 1100 INVITATION FOR BIDS

#### **PART 1 - GENERAL**

#### 1.01 JONESBORO JOE MACK CAMPBELL PARK CONCESSION BUILDING

- A. The City of Jonesboro is requesting **SEALED** proposals from Qualified Licensed General Contractors for the furnishing of materials, labor, equipment, tools, accessories, and supervision necessary for completing the above referenced project.
- B. SEALED Proposals for Complex 4 Concession Building, Joe Mack Campbell Park, will be received by the City of Jonesboro, Jonesboro, Arkansas, hereinafter termed Owner, until 2:00 p.m. local time, November 29, 2017, in the Third Floor Conference Room, located in the Municipal Building, 300 South Church Street, Jonesboro, Arkansas, where the Proposals will be opened and read aloud. All Proposers are invited to attend. There will be only one proposal for the entire project.
- C. Proposals shall be submitted on the form provided by the Architect and be delivered in a sealed opaque envelope clearly identifying the Proposer's name and Proposer's Arkansas Contractor's license number and Bid Number 2017:35 on the front. B Proposals may be delivered at the Proposal opening location, or be mailed or delivered to: Attn: Mr. Steve Kent, Purchasing Agent, 300 South Church Street, Jonesboro, Arkansas 72401. Bids not received by the Bid time and date listed above will not be accepted and will be returned unopened.
- D. Proposers are to comply with all plans and specifications for this project.
- E. Proposals will be based on a lump sum basis.
- F. Scope of work consists of a new Concession Building at Complex 4 at the Jonesboro Joe Mack Campbell Park sport complex. Work includes site preparation, concrete pavement removal and replacement, concrete footings, concrete slab-on-grade, load bearing concrete masonry units, pre-fabricated wood roof trusses, standing seam metal roof panels on plywood roof deck, painting, floor coverings, hollow metal doors and frames, door hardware, aluminum windows, and painted steel railings. Work includes complete HVAC, plumbing, and electrical work. Exterior site work as required by Geotechnical Report and as shown on Site Plan drawing.
- G. Construction documents may be examined at the following offices:
  - 1. City of Jonesboro, Engineering Department, 300 South Church Street, Jonesboro, Arkansas 72401 (870) 932-2438
  - 2. Fisher Arnold, Inc., 1801 LaTourette Drive, Jonesboro, Arkansas 72404; (870) 932-2019
  - 3. Jonesboro Blueprint, 222 S. Madison St., Jonesboro, Arkansas 72401; 870-932-4349

- H. The Construction Documents may be obtained from Jonesboro Blueprint, on the following basis:
  - Prospective Proposers may purchase (non-refundable) hard copy construction drawings and project manual and/or digital format copies from Jonesboro Blueprint at the fair market purchase price to be set by the printing company. The purchaser is responsible for the cost of shipping and handling as required.
  - 2. For the mutual protection of the Owner, Contractor, and Architect, no partial sets of Construction Documents will be issued regardless of the purchased format.
- I. Bid security (with Power of Attorney attached) in the form of a Bid Bond, Cashiers or Certified Check, in an amount equal to 5% of the Bid submitted, and payable to Jonesboro Public Schools must accompany each Proposal as a guarantee that, if awarded the contract, the proposer will promptly enter into a contract and execute such bonds as may be required.
- J. Performance and Payment Bond, equal to the full Amount of the Contract, will be required of the proposer awarded the Contract prior to execution of the Contract.
- K. The proposer awarded the Contract will be required to submit proof of Liability Insurance and proof of Commercial General Liability Insurance on forms similar to the samples attached in Section 00 6000 - Project Forms prior to execution of the Contract.
- L. All bidders must conform to the requirements of the Arkansas Contractor's Licensing
- M. No bidder may withdraw his Bid within 60 days after the actual date of the opening thereof.
- N. The Owner reserves the right to reject any or all Proposals, and waive any formalities not bound by Arkansas statutes. Proposals which fail to comply fully with any provision of the Construction Documents will be considered invalid and will not receive consideration. Proposals shall be addressed to the undersigned.

Mr. Steve Kent Purchasing Agent 300 South Church Street Jonesboro, Arkansas 72401

**END OF SECTION** 

## SECTION 00 2113 INSTRUCTIONS TO BIDDERS

#### **SUMMARY**

- 1.01 SEE AIA DOCUMENT A701 (1997 EDITION, INSTRUCTIONS TO BIDDERS), FOLLOWING THIS DOCUMENT.
- 1.02 THE INSTRUCTIONS IN THIS DOCUMENT AMEND OR SUPPLEMENT THE INSTRUCTIONS TO BIDDERS AND OTHER PROVISIONS OF THE BIDDING AND CONTRACT DOCUMENTS.

**END OF SECTION** 

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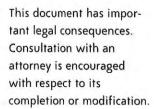
## AIA DOCUMENT A701-1997



## Instructions to Bidders

### TABLE OF ARTICLES

- 1. DEFINITIONS
- 2. BIDDER'S REPRESENTATIONS
- 3. BIDDING DOCUMENTS
- 4. BIDDING PROCEDURES
- 5. CONSIDERATION OF BIDS
- 6. POST-BID INFORMATION
- 7. PERFORMANCE BOND AND PAYMENT BOND
- 8. FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR





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## ARTICLE 1 DEFINITIONS

- 1.1 Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.
- 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.
- 1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.
- **1.8** A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
- 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.

## ARTICLE 2 BIDDER'S REPRESENTATIONS

- 2.1 The Bidder by making a Bid represents that:
- 2.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.
- 2.1.2 The Bid is made in compliance with the Bidding Documents.
- **2.1.3** The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
- 2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.



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#### ARTICLE 3 BIDDING DOCUMENTS

#### 3.1 COPIES

- 3.1.1 Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder's deposit will be refunded.
- **3.1.2** Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the Advertisement or Invitation to Bid, or in supplementary instructions to bidders.
- **3.1.3** Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- **3.1.4** The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

## 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

- **3.2.1** The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.
- **3.2.2** Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.
- **3.2.3** Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

#### 3.3 SUBSTITUTIONS

- **3.3.1** The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
- **3.3.2** No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.
- **3.3.3** If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.



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INSTRUCTIONS TO BIDDERS

**3.3.4** No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

#### 3.4 ADDENDA

- **3.4.1** Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents.
- **3.4.2** Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
- **3.4.3** Addenda will be issued no later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.
- **3.4.4** Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

#### ARTICLE 4 BIDDING PROCEDURES

- 4.1 PREPARATION OF BIDS
- 4.1.1 Bids shall be submitted on the forms included with the Bidding Documents.
- 4.1.2 All blanks on the bid form shall be legibly executed in a non-erasable medium.
- **4.1.3** Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.
- 4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.
- **4.1.5** All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."
- **4.1.6** Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.
- 4.1.7 Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

#### 4.2 BID SECURITY

**4.2.1** Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Paragraph 6.2.



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- **4.2.2** If a surety bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.
- **4.2.3** The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

#### 4.3 SUBMISSION OF BIDS

- 4.3.1 All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
- **4.3.2** Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.
- **4.3.3** The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
- **4.3.4** Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered.

## 4.4 MODIFICATION OR WITHDRAWAL OF BID

- **4.4.1** A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.
- **4.4.2** Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date- and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.
- **4.4.3** Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.
- **4.4.4** Bid security, if required, shall be in an amount sufficient for the Bid as resubmitted.

#### ARTICLE 5 CONSIDERATION OF BIDS

#### 5.1 OPENING OF BIDS

At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

#### 5.2 REJECTION OF BIDS

The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.



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#### 5.3 ACCEPTANCE OF BID (AWARD)

- **5.3.1** It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.
- **5.3.2** The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

#### ARTICLE 6 POST-BID INFORMATION

#### 6.1 CONTRACTOR'S QUALIFICATION STATEMENT

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

#### 6.2 OWNER'S FINANCIAL CAPABILITY

The Owner shall, at the request of the Bidder to whom award of a Contract is under consideration and no later than seven days prior to the expiration of the time for withdrawal of Bids, furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Unless such reasonable evidence is furnished, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

#### 6.3 SUBMITTALS

- **6.3.1** The Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, after notification of selection for the award of a Contract, furnish to the Owner through the Architect in writing:
  - 1 a designation of the Work to be performed with the Bidder's own forces;
  - .2 names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; and
  - .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work,
- **6.3.2** The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.
- **6.3.3** Prior to the execution of the Contract, the Architect will notify the Bidder in writing if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.
- **6.3.4** Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.



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#### ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

#### 7.1 BOND REQUIREMENTS

- 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.
- **7.1.2** If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.
- **7.1.3** If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

#### 7.2 TIME OF DELIVERY AND FORM OF BONDS

- 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Subparagraph 7.2.1.
- **7.2.2** Unless otherwise provided, the bonds shall be written on AIA Document A<sub>312</sub>, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.
- 7.2.3 The bonds shall be dated on or after the date of the Contract.
- **7.2.4** The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

#### ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.



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## SECTION 00 2117 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

#### 1.01 GENERAL INFORMATION

- A. The "Instructions to Bidders", Standard form A701 of the American Institute of Architects, May, 1997 Edition, Articles 1 through 8, thereafter referred to as Instructions to Bidders, are hereby made a part of these specifications. Submission of a proposal will be taken as evidence that these articles have been examined, read and compiled with.
- B. The Supplementary Instructions modify, change, delete or add to the Instruction to Bidders. Where any part of the Instructions to Bidders is modified or voided by the Supplementary Instructions, the unaltered provisions of that part shall remain. In case of conflict, the Supplementary Instructions of these specifications take precedence over the Instructions to Bidders. The Instructions to Bidders, as well as the Supplementary Instructions shall cover all contracts and subcontracts and material suppliers on this job.

#### 1.02 AMENDMENTS AND SUPPLEMENTARY INSTRUCTIONS

- A. The designated Articles of the AIA Document, Form A701, shall be amended and/or supplemented as follows:
  - Refer to ARTICLE 2; BIDDER'S REPRESENTION
    - a. Add the following paragraph:
      - 2.1.5 Each Bidder, by making his Bid, represents that he and his Sub-Bidders are licensed in accordance with the laws of the State of Arkansas.
  - 2. Refer to ARTICLE 3; BIDDING DOCUMENTS
    - a. Revise the following paragraph to read as follows:
      - 3.2.2 Substitutions for specified products will be considered under the provisions of Section 01 6000 - PRODUCT REQUIREMENTS.
  - 3. Refer to ARTICLE 7; PERFORMANCE BOND AND PAYMENT BOND.
    - a. Add the following paragraph:
      - 7.1.4 The successful bidder shall provide a Performance and Labor and Material Payment Bond in the amount of one hundred percent (100%) of the contract sum, under the provisions stated in Article 7.
  - 4. Add the following ARTICLE:
    - a. ARTICLE 9 ADDITIONIAL REQUIRMENTS
      - 1) 9.1 ARKANSAS CONTRACTORS BOND LAW (Act 37 of 1992)
        - (a) 9.1.1 Comply with requirements of the Arkansas Code Annotated Section 17 -22-401 et. seq. A copy of the bond shall be filed with the Director of the Department

of Finance and Administration by Contractor under provisions of Section 17-22-404 shall also be filed as a matter of record with the Contractor Licensing Board. — Contractors Licensing Board, 621 E. Capitol, Little Rock, Arkansas (501) 372-4661.

- 2) 9.2 RETAINAGE
  - (a) 9.2.1 A retainage will be withheld from Progress Payments as specified in the Modifications to General Conditions.
- 3) 9.3 TIME OF COMPLETION
  - (a) 9.3.1 The Work required by the Contract Documents shall be Substantially Complete as indicated in Section 00 8250 - Liquidated Damages.
- 4) 9.4 LIQUIDATED DAMAGES
  - (a) 9.4.1 Refer to Section 00 8250 LIQUIDATED DAMAGES

**END OF SECTION** 

## SECTION 00 4200 BID PROPOSAL FORM

## 1.01 BID PROPOSAL

A.	BIDD	DER'S INFORMATION						
	Com	pany Name:						
	Company Address:							
	Cont	Contractor's License No:						
	Tele	phone No.:						
	Fax N	Fax No:						
	Email Address:							
		inafter called "Bidder".						
В.	own	NER'S INFORMATION						
	Craig	Craig Light, P.E., Engineering Director						
	300 9	South Church Street						
	Jone	sboro, Arkansas 72401						
	Here	inafter called "Owner"						
C.	PROF	POSED PROJECT						
	Com	plex 4 Concession Building, Joe Mack Campbell Park						
	City	of Jonesboro Project #						
CON TIMI ALL	STRUCT SET FO EXPENSE	HEREBY PROPOSES TO FURNISH ALL LABOR, MATERIALS, AND SUPPLIES, AND TO THE PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, WITHIN THE RTH THEREIN, AND AT THE PRICES STATED BELOW. THESE PRICES ARE TO COVER INCURRED IN PERFORMING THE WORK REQUIRED UNDER THE CONTRACT S, OF WHICH THIS PROPOSAL IS A PART.						
A.	ADDI	ENDA						
	The U	The Undersigned has received and examined the following Addenda:						
	1.							
	2.							
	3.							
		No. Dated						
В.								
	BASE	No. Dated						
	BASE 1.	No. Dated						
		No. Dated						
		No. Dated						
		No. Dated						

1.02

(Amount shall be indicated in both words and figures. In case of discrepancy, the amount indicated in words shall govern).

#### C. CONTRACT TIME

- Bidder agrees to commence work under this contract within ten days of the date of "Notice to Proceed" from the Owner.
- Bidder agrees to Substantially Complete the project in days from the date of Notice to Proceed.

#### D. UNIT PRICES

- The following list of unit prices shall be submitted with Proposal. The unit prices listed shall be used for computing the cost of all work added to, or deducted from, the contract drawings and specifications, as they may apply. Unit prices shall include the cost of labor and materials together with taxes, overhead and profit for material, installed in place:
- a. Price per cubic yard for undercutting and replacement of unsuitable materials:

  1) ADD: / CY

#### E. FURTHER CONDITIONS

The Undersigned, by submitting this Bid, further agrees:

- This Bid shall be valid and may not be withdrawn within 30 days after the scheduled closing time for receiving bids.
- 2. To accept the provisions of Section 00 1100 INVITATION FOR BIDS
- 3. To accept the provisions of Section 00 2113 -INSTRUCTIONS TO BIDDERS.
- To accept the provisions of Section 00 2117 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS.
- To enter into and execute a Contract, if awarded, on the basis of this Proposal, and to furnish the Performance Bond, Labor and Material Payment Bond, Proof of Liability Insurance, and Proof of General Commercial Liability Insurance in accordance with the General Conditions of the Contract.
- Upon notice of the acceptance of this bid, bidder shall execute the contract and deliver a surety bond within 10 calendar days.
- 7. The bid security (5% of the Bid) attached in the sum of \_\_\_\_\_\_\_Dollars (\$ \_\_\_\_\_\_)
- 8. To accomplish the Work in accordance with the Contract Documents, of which this Proposal is made a part.
- 9. To coordinate and schedule all Work with the Owner.
- 10. The Owner may reject any and all bids and may reject a bid of any party who has failed to perform satisfactorily, been unfaithful and/or delinquent in any former relationship with the Owner. The Owner reserves the right to waive any irregularities or formalities in any solicitation or bid response. The Owner shall be the sole judge as to which bid is best and, in determining that fact, may consider the contractor's business integrity, financial resources, experience, facilities, and/or capacity for performing the work.

F.	SUBCONTRACTORS					
	1.	Sub	Subcontractors and license numbers:			
		a.	Plum	Plumbing:		
			1)	License No		
		b.	Mechanical:			
			1)	License No		
		c.	Electric	cal:		
			1)	License No.		
		d.	Masonry:			
				License No.		
		e.		g:		
			1)	License No		
			2)	Include with this Bid a copy of the Roofing Manufacturer's		
				Certification as held by the above-named Roofing		
				Subcontractor.		
G.	SUBMITTED BY:					
	1.	Bidd	Bidder:			
		a.				
		b.	Date:			

**END OF SECTION** 

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## SECTION 00 5200 AGREEMENT FORM

#### **PART 1 GENERAL**

#### **FORM OF AGREEMENT**

- 2.01 "AIA 101 2007 EDITION STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR WHERE THE BASIS OF PAYMENT IS A STIPULATED SUM" FORMS THE BASIS OF CONTRACT BETWEEN THE OWNER AND CONTRACTOR.
- 2.02 RELATED REQUIREMENTS
  - A. Section 00 7200 General Conditions.
  - B. Section 00 7300 Supplementary Conditions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

**END OF AGREEMENT FORM** 

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# **Standard Form of Agreement Between Owner and Contractor** where the basis of payment is a Stipulated Sum

AGREEMENT made as of the in the year (In words, indicate day, month and year)

BETWEEN the Owner: (Name, address and other information)

City of Jonesboro Parks & Recreation 3009 Dan Avenue Jonesboro, Arkansas 72401

and the Contractor: (Name, address and other information)

day of

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201<sup>TM</sup>—2007, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

for the following Project: (Name, location, and detailed description)

Complex 4 Concession Building Joe Mack Campbell Park 3021 Dan Avenue Jonesboro, Arkansas 72401

The Architect: (Name, address and other information)

Fisher Arnold, Inc. 9180 Crestwyn Hills Drive Memphis, Tennessee 38125

The Owner and Contractor agree as follows.

#### TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS
- 10 INSURANCE AND BONDS

#### ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

#### ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

#### ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.

(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

If, prior to the commencement of the Work, the Owner requires time to file mortgages and other security interests, the Owner's time requirement shall be as follows:

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than ( ) days from the date of commencement, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

, subject to adjustments of this Contract Time as provided in the Contract Documents.

(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

#### ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be

Dollars (\$ ), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 4.3 Unit prices, if any:

(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

Item

Units and Limitations

Price Per Unit

§ 4.4 Allowances included in the Contract Sum, if any: (Identify allowance and state exclusions, if any, from the allowance price.)

Item

Price

### ARTICLE 5 PAYMENTS § 5.1 PROGRESS PAYMENTS

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3	Provided that an Applie	cation for Payment is recei	ved by the Architect	not later than the
(				amount to the Contractor not later than the
	(	) day of the	(	) month. If an Application for Payment
is rece	ived by the Architect af	ter the application date fix	ed above, payment s	hall be made by the Owner not later than
	(			lication for Payment.
(Feder	ral, state or local laws n	nay require payment within	n a certain period of	time.)

- § 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.
- § 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- § 5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
  - .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of percent ( %). Pending final determination of cost to the Owner of changes in the Work. amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A201<sup>TM</sup>–2007, General Conditions of the Contract for Construction;
  - Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of percent (%):
  - .3 Subtract the aggregate of previous payments made by the Owner; and
  - .4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.
- § 5.1.7 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:
  - Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and (Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)
  - .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.
- § 5.1.8 Reduction or limitation of retainage, if any, shall be as follows: (If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

#### § 5.2 FINAL PAYMENT

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201-2007, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

## ARTICLE 6 DISPUTE RESOLUTION § 6.1 INITIAL DECISION MAKER

The Architect will serve as Initial Decision Maker pursuant to Section 15.2 of AIA Document A201–2007, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker. (If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

#### § 6.2 BINDING DISPUTE RESOLUTION

For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Document A201–2007, the method of binding dispute resolution shall be as follows:

(Check the appropriate box. If the Owner and Contractor do not select a method of binding dispute resolution below, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.)

Arbitration pursuant to Section 15.4 of AIA Document A201–2007
Litigation in a court of competent jurisdiction
Other (Specify)

#### ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2007.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201-2007.

Init.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located. (Insert rate of interest agreed upon, if any.)

§ 8.3 The Owner's representative: (Name, address and other information)

§ 8.4 The Contractor's representative: (Name, address and other information)

§ 8.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions:

## ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101-2007. Standard Form of Agreement Between Owner and Contractor.

§ 9.1.2 The General Conditions are AIA Document A201-2007, General Conditions of the Contract for Construction.

§ 9.1.3 The Supplementary and other Conditions of the Contract:

Document Title Date Pages

§ 9.1.4 The Specifications:

(Either list the Specifications here or refer to an exhibit attached to this Agreement.)

Section Title Date Pages

§ 9.1.5 The Drawings: (Either list the Drawings here or ref.	er to an exhibit attached to this Agreement	t.)
Number	Title	Date
§ 9.1.6 The Addenda, if any:		
Number	Date	Pages
Portions of Addenda relating to biddi requirements are also enumerated in t	ng requirements are not part of the Contra this Article 9.	ct Documents unless the bidding
§ 9.1.7 Additional documents, if any1 AIA Document E2011	forming part of the Contract Documents: M–2007. Digital Data Protocol Exhibit, if o	completed by the parties, or the following
forms and the Contractor's bid are no	sy, listed below: hat are intended to form part of the Contri- ents such as advertisement or invitation to not part of the Contract Documents unless e to be part of the Contract Documents.)	hid Instructions to Ridders comple
3201-2007.	s intain insurance and provide bonds as set and limits of liability for insurance required	
his Agreement entered into as of the	day and year first written above.	
OWNER (Signature)	CONTRACTOR (	Signature)
Printed name and title)	(Printed name a	
AUTION: You should sign an original A hanges will not be obscured.	IA Contract Document, on which this text ap	

Init.

11

### SECTION 00 6000 PROJECT FORMS

#### **BOND FORMS REQUIRED:**

#### 1.01 BID BOND

A. Each bid will include with it a bid bond in the amount of 5% of the total bid offered. It will be in the form of a cashier's check or insurance surety bond (with Power of Attorney attached) made payable to the owner.

#### 1.02 PERFORMANCE AND PAYMENT BONDS:

- A Performance and Payment Bonds, AlA Document A312, March 1987 Edition
- B. The "Performance and Payment Bond" will be in the amount equal to 100% of the contract price as security for the faithful performance of this contract price and for payment of all indebtedness for labor and materials furnished or performed in connection with this contract. The bond will be written by a surety company which is qualified and is authorized to do business in the State of Arkansas, according to AC.A. 22-9-402(a)(b) and filing with said bond, his power of attorney as his authority. The bond will be written in favor of the Owner and executed per Arkansas state law. An original and two (2) copies of the bond must be furnished, with power of attorney attached to each. The Contractor will file and record the original with the Clerk in the Circuit Court of Craighead County. The Contractor is to pay all expense incidentals to file the bond. The remaining two copies should be certified by the Clerk to evidence the filing of the original and these two copies submitted to the Jonesboro Department of Parks & Recreation.

#### 1.03 INSURANCE CERTIFICATES REQUIRED:

- G715 Supplemental Attachment for Accord Certificate of Insurance (25-2) 1991.
- B. Conform with Requirements as shown in attached sample certificates following this page and include similar certificates with Bid Proposal.
  - Sample Certificate of Liability Insurance naming Jonesboro Public Schools as Certificate Holder
  - 2. Sample Certificate of Commercial General Liability.

#### **END OF SECTION**

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## THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A312

# **Performance Bond**

CONTRACTOR (Name and Addre	ess):	SURETY (Name and Prince	cipal Place of Business):
OWNER (Name and Address):			
CONSTRUCTION CONTRACT Date: Amount: Description (Name and Location	on):		
BOND Date (Not earlier than Constru Amount: Modifications to this Bond:		: □ None	□ See Page 3
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Seal)
Signature: Name and Title:		Signature: Name and Title:	
(Any additional signatures appea	r on page 3)		

- 1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
- 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
- 3 If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
  - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and
  - 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
  - 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
- 4 When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
  - **4.1** Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
  - **4.2** Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
  - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
  - **4.4** Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
    - .1 After investigation, determine the amount for

- which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner citing reasons therefor.
- 5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
- 6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
  - **6.1** The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
  - **6.2** Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
  - **6.3** Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.
- 8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- 9 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation avail-

able to sureties as a defense in the jurisdiction of the suit shall be applicable.

- 10 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.
- 11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 12 DEFINITIONS

12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Con-

tractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

- 12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
- 12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS	TO	THIS	BOND	ARE	AS	FO	LLOW	S:

(Space is provided below for additi	onal signatures of added	parties, other than those appe	earing on the cover page.)
CONTRACTOR AS PRINCIPAL Company:	(Corporate Seal)	SURETY Company:	(Corporate Seal)
Signature:		Signature: Name and Title: Address:	

## THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A312

# **Payment Bond**

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable. CONTRACTOR (Name and Address): SURETY (Name and Principal Place of Business): OWNER (Name and Address): CONSTRUCTION CONTRACT Date: Amount: Description (Name and Location): BOND Date (Not earlier than Construction Contract Date): Amount: Modifications to this Bond: ☐ None ☐ See Page 6 CONTRACTOR AS PRINCIPAL SURETY Company: (Corporate Seal) (Corporate Seal) Company: Signature: \_ Signature: Name and Title: Name and Title: (Any additional signatures appear on page 6) (FOR INFORMATION ONLY-Name, Address and Telephone)

other party):

AGENT or BROKER:

OWNER'S REPRESENTATIVE (Architect, Engineer or

- 1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
- 2 With respect to the Owner, this obligation shall be null and void if the Contractor:
  - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
  - 2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.
- 3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
- 4 The Surety shall have no obligation to Claimants under this Bond until:
  - 4.1 Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
  - **4.2** Claimants who do not have a direct contract with the Contractor:
    - .1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and
    - .2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
    - .3 Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
- 5 If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

- 6 When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
  - 6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
  - **6.2** Pay or arrange for payment of any undisputed amounts.
- 7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- 8 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 9 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- 11 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this

Bond shall be construed as a statutory bond and not as a common law bond.

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

#### 15 DEFINITIONS

15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the

Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

- 15.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- **15.3** Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS	TO	THIS	BOND	ARE	AS	FOI	LLO.	WS	:

(Space is provided below for addition	onal signatures of added	parties, other than those appe	aring on the cover page.)
CONTRACTOR AS PRINCIPAL Company:	(Corporate Seal)	SURETY Company:	(Corporate Seal)
Signature: Name and Title: Address:	· · · · · · · · · · · · · · · · · · ·	Signature: Name and Title: Address:	

## SUPPLEMENTAL ATTACHMENT FOR ACORD CERTIFICATE OF INSURANCE 25-S (7/90).

AIA DOCUMENT G715

(Tb	is doc	cument replaces AIA Document G705, Certificate of Insurance,	)						
PR	OJEC	T							
IN	SURE	D							
Α.	Gen	neral Liability	Yes	No N/A					
	1.	Does the General Aggregate apply to this Project only:							
	2.	Does this policy include coverage for:  a. Premises—Operations?  b. Explosion, Collapse and Underground Hazards?  c. Personal Injury Coverage?  d. Products Coverage?  e. Completed Operations?  f. Contractual Coverage for the Insured's obligation	as in A201?						
	3.	If coverage is written on a claims-made basis, what is a. Retroactive Date? b. Extended Reporting Date?	the:						
В.	Wor	ker's Compensation							
	1.	If the Insured is exempt from Worker's Compensation stapensation coverage?		rry the equivalent Voluntary Com-					
C.	Fina	Final Payment Information							
	1.	Is this certificate being furnished in connection with the requirements of Subparagraphs 9.10.2 and 11.1.3 of for Construction?	f AIA Document A201, Ge	eneral Conditions of the Contract					
	2.	If so, and if the policy period extends beyond terminatio coverage for this Project continued for the balance of	the policy period? $\Box$	truction, is Completed Operations					
D.	Terr	Termination Provisions							
	1.	Has each policy shown on the certificate and this Suppondice of cancellation and/or expiration? List below an	y policies which do not	provide the holder with 30 days contain this notice.					
E.	Oth	er Provisions							
			7.00						
			Authorized Representative						
Pince Street			Date of Issue						

CAUTION: You should sign an original AIA document which has this caution printed in red. An original assures that changes will not be obscured as may occur when documents are reproduced.

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## SECTION 00 6400 RELEASE OF CLAIMS

1.01	COM	IES THE UNDERSIGNED, WHO DOES HEREBY SWEAR AND AFFIRM THAT:						
	A.	My name is:						
	B.	My address is:						
	C.	Doing business as:						
	D.	Pursuant to Contract Number:						
	E.	Contract Description:						
	F.	Contract Date:						
1.02	OBLI AND ARIS REFE	PTED AS LISTED BELOW IN PARAGRAPH 4, I HAVE PAID OTHERWISE SATISFIED ALL GATIONS FOR ALL MATERIALS AND EQUIPMENT FURNISHED, FOR ALL WORK, LABOR, SERVICES PERFORMED, AND FOR ALL KNOWN CLAIMS AGAINST THE CONTRACTOR ING IN ANY MANNER IN CONNECTION WITH THE PERFORMANCE OF THE CONTRACT RENCED ABOVE FOR WHICH THE OWNER OR HIS PROPERTY MIGHT IN ANY WAY BE HELD ONSIBLE.						
1.03	PARA INCO MAT HAVI	HE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, EXCEPT AS LISTED BELOW IN AGRAPH 4, THE RELEASES OR WAIVERS OF CLAIM, ATTACHED HERETO AND PROPORATED HEREIN, INCLUDE THE CONTRACT, ALL SUBCONTRACTORS, ALL SUPPLIERS OF ERIALS AND EQUIPMENT, AND ALL PERFORMERS OF WORK, LABOR OR SERVICES WHO E OR MAY HAVE CLAIMS AGAINST ANY PROPERTY OF THE OWNER ARISING IN ANY INER OUT OF THE PERFORMANCE OF THE CONTRACT REFERENCED ABOVE.						
1.04		THE EXCEPTIONS ARE: (IF NONE, INDICATE "NONE." THE CONTRACTOR SHALL FURNISH BOND SATISFACTORY TO THE OWNER FOR EACH EXCEPTION).						
	A.	Exception(s):						
	В.	Affiant name:						
	C.	Date:						
VERIF	ICATIO	N						
STATE	OF AR	KANSAS						
COUN	TY OF:							
SUBSC	RIBED	AND SWORN TO BEFORE ME THIS DATE:						
NOTA	RY PUB	LIC NAME:						
MY CO	OMMIS	SION EXPIRES:						

**END OF SECTION** 

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# SECTION 00 7200 GENERAL CONDITIONS

#### FORM OF GENERAL CONDITIONS

1.01 "AIA DOCUMENT A-201 - 2007, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" FORMS THE BASIS OF CONTRACT BETWEEN THE OWNER AND CONTRACTOR.

#### SUPPLEMENTARY CONDITIONS

2.01 REFER TO SECTION 00 7300 - SUPPLEMENTARY CONDITIONS, FOR AMENDMENTS TO THESE GENERAL CONDITIONS.

**END OF SECTION** 

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## General Conditions of the Contract for Construction

#### for the following PROJECT:

(Name and location or address)
Complex 4 Concession Building
Joe Mack Campbell Park
3021 Dan Avenue

Jonesboro, Arkansas 72401

#### THE OWNER:

(Name and address)
City of Jonesboro Parks & Recreation
3009 Dan Avenue
Jonesboro, Arkansas 72401

#### THE ARCHITECT:

(Name and address)
Fisher Arnold, Inc.
1801 Latourette Drive
Jonesboro, Arkansas 72401

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- 3 CONTRACTOR
- 4 ARCHITECT
- 5 SUBCONTRACTORS
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- 7 CHANGES IN THE WORK
- 8 TIME
- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
- 11 INSURANCE AND BONDS
- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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#### ARTICLE 1 GENERAL PROVISIONS

#### § 1.1 BASIC DEFINITIONS

#### § 1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding requirements.

#### § 1.1.2 THE CONTRACT

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

#### § 1.1.3 THE WORK

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

#### § 1.1.4 THE PROJECT

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

#### § 1.1.5 THE DRAWINGS

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

#### § 1.1.6 THE SPECIFICATIONS

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

#### § 1.1.7 INSTRUMENTS OF SERVICE

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

#### § 1.1.8 INITIAL DECISION MAKER

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2.

## § 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

- § 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall 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 that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

#### § 1.3 CAPITALIZATION

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other documents published by the American Institute of Architects.

#### § 1.4 INTERPRETATION

In the interest of brevity 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.

#### § 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

- § 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.
- § 1.5.2 The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants.

#### § 1.6 TRANSMISSION OF DATA IN DIGITAL FORM

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

## ARTICLE 2 OWNER

#### § 2.1 GENERAL

- § 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.
- § 2.1.2 The Owner shall furnish to the Contractor within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

#### § 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

§ 2.2.1 Prior to commencement of the Work, the Contractor may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. Thereafter, the Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change. After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

- § 2.2.2 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- § 2.2.3 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.
- § 2.2.4 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.
- § 2.2.5 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

## § 2.3 OWNER'S RIGHT TO STOP THE WORK

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

## § 2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

#### ARTICLE 3 CONTRACTOR

#### § 3.1 GENERAL

- § 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.
- § 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.
- § 3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

## § 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

- § 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.
- § 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.
- § 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall make Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

#### § 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- § 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.
- § 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.
- § 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

#### § 3.4 LABOR AND MATERIALS

- § 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- § 3.4.2 Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

#### § 3.5 WARRANTY

The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

#### § 3.6 TAXES

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

### § 3.7 PERMITS, FEES, NOTICES, AND COMPLIANCE WITH LAWS

- § 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.
- § 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.
- § 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.
- § 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may proceed as provided in Article 15.
- § 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

#### § 3.8 ALLOWANCES

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct,

but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.
- § 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

#### § 3.9 SUPERINTENDENT

- § 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.
- § 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the name and qualifications of a proposed superintendent. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to the proposed superintendent or (2) that the Architect requires additional time to review. Failure of the Architect to reply within the 14 day period shall constitute notice of no reasonable objection.
- § 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

### § 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

- § 3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.
- § 3.10.2 The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Architect's approval. The Architect's approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.
- § 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

#### § 3.11 DOCUMENTS AND SAMPLES AT THE SITE

The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications. in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

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#### § 3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- § 3.12.1 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.
- § 3.12.2 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.
- § 3.12.3 Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- § 3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.
- § 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.
- § 3.12.6 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- § 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect.
- § 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.
- § 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions.
- § 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled

to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

#### § 3.13 USE OF SITE

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes. rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

#### § 3.14 CUTTING AND PATCHING

§ 3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting and patching shall be restored to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

#### § 3.15 CLEANING UP

§ 3.15.1 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 waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and Owner shall be entitled to reimbursement from the Contractor.

#### § 3.16 ACCESS TO WORK

The Contractor shall provide the Owner and Architect access to the Work in preparation and progress wherever located.

#### § 3.17 ROYALTIES, PATENTS AND COPYRIGHTS

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

#### § 3.18 INDEMNIFICATION

§ 3.18.1 To the fullest extent permitted by law the Contractor shall indemnify and hold harmless the Owner, Architect. Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce

other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

#### ARTICLE 4 ARCHITECT

#### § 4.1 GENERAL

- § 4.1.1 The Owner shall retain an architect lawfully licensed to practice architecture or an entity lawfully practicing architecture in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.
- § 4.1.2 Duties, responsibilities and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner, Contractor and Architect. Consent shall not be unreasonably withheld.
- § 4.1.3 If the employment of the Architect is terminated, the Owner shall employ a successor architect as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

## § 4.2 ADMINISTRATION OF THE CONTRACT

- § 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate For Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.
- § 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1.
- § 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor. Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

## § 4.2.4 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Architect about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.

- § 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.
- § 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the

Work in accordance with Sections 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

- § 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- § 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.
- § 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.
- § 4.2.10 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.
- § 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.
- § 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions rendered in good faith.
- § 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.
- § 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## ARTICLE 5 SUBCONTRACTORS

#### § 5.1 DEFINITIONS

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Subsubcontractor.

## § 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to any such proposed person or entity or (2) that the Architect requires additional time for review. Failure of the Owner or Architect to reply within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitution.

#### § 5.3 SUBCONTRACTUAL RELATIONS

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

### § 5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

- § 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.
- § 5.4.3 Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

## ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS § 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

- § 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.
- § 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- § 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.
- § 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights that apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11 and 12.

#### § 6.2 MUTUAL RESPONSIBILITY

- § 6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- § 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.
- § 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a separate contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a separate contractor's delays, improperly timed activities, damage to the Work or defective construction.
- § 6.2.4 The Contractor shall promptly remedy damage the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner, separate contractors as provided in Section 10.2.5.
- § 6.2.5 The Owner and each separate contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

### § 6.3 OWNER'S RIGHT TO CLEAN UP

If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

# ARTICLE 7 CHANGES IN THE WORK § 7.1 GENERAL

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

## § 7.2 CHANGE ORDERS

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor and Architect stating their agreement upon all of the following:

.1 The change in the Work;

.2 The amount of the adjustment, if any, in the Contract Sum; and

.3 The extent of the adjustment, if any, in the Contract Time.

# § 7.3 CONSTRUCTION CHANGE DIRECTIVES

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

.1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;

.2 Unit prices stated in the Contract Documents or subsequently agreed upon:

.3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or

.4 As provided in Section 7.3.7.

§ 7.3.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 7.3.5 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.6 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

- § 7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to the following:
  - .1 Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
  - .2 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
  - .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
  - .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
  - .5 Additional costs of supervision and field office personnel directly attributable to the change.
- § 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- § 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.
- § 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

#### § 7.4 MINOR CHANGES IN THE WORK

The Architect has authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order signed by the Architect and shall be binding on the Owner and Contractor.

# ARTICLE 8 TIME

# § 8.1 DEFINITIONS

- § 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- § 8.1.2 The date of commencement of the Work is the date established in the Agreement.
- § 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.
- § 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

#### § 8.2 PROGRESS AND COMPLETION

- § 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
- § 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be

furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

# § 8.3 DELAYS AND EXTENSIONS OF TIME

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner; or by changes ordered in the Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and arbitration; or by other causes that the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

- § 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.
- § 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

# ARTICLE 9 PAYMENTS AND COMPLETION § 9.1 CONTRACT SUM

The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

#### § 9.2 SCHEDULE OF VALUES

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit to the Architect, before the first Application for Payment, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

# § 9.3 APPLICATIONS FOR PAYMENT

- § 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2., for completed portions of the Work. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and shall reflect retainage if provided for in the Contract Documents.
- § 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.
- § 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.
- § 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.
- § 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the

Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

#### § 9.4 CERTIFICATES FOR PAYMENT

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data comprising the Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous onsite inspections to check the quality or quantity of the Work. (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

### § 9.5 DECISIONS TO WITHHOLD CERTIFICATION

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.3 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Architect will reflect such payment on the next Certificate for Payment.

#### § 9.6 PROGRESS PAYMENTS

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

- § 9.6.2 The Contractor shall pay each Subcontractor no later than seven days after receipt of payment from the Owner the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.
- § 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.
- § 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor, except as may otherwise be required by law.
- § 9.6.5 Contractor payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.
- § 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
- § 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

## § 9.7 FAILURE OF PAYMENT

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

# § 9.8 SUBSTANTIAL COMPLETION

- § 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.
- § 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- § 9.8.3 Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 PARTIAL OCCUPANCY OR USE

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 FINAL COMPLETION AND FINAL PAYMENT

§ 9.10.1 Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

- § 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from
  - .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
  - .2 failure of the Work to comply with the requirements of the Contract Documents; or
  - .3 terms of special warranties required by the Contract Documents.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

# ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY § 10.1 SAFETY PRECAUTIONS AND PROGRAMS

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.

# § 10.2 SAFETY OF PERSONS AND PROPERTY

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to

- .1 employees on the Work and other persons who may be affected thereby:
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Subsubcontractors; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- § 10.2.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.
- § 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.
- § 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- § 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

#### § 10.2.8 INJURY OR DAMAGE TO PERSON OR PROPERTY

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

## § 10.3 HAZARDOUS MATERIALS

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing.

§ 10.3.2 Upon receipt of the Contractor's written notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.

### § 10.4 EMERGENCIES

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

# ARTICLE 11 INSURANCE AND BONDS § 11.1 CONTRACTOR'S LIABILITY INSURANCE

§ 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- .7 Claims for bodily injury or property damage arising out of completed operations; and
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.

§ 11.1.2 The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment, and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Owner, the Architect and the Architect's Consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

#### § 11.2 OWNER'S LIABILITY INSURANCE

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

#### § 11.3 PROPERTY INSURANCE

§ 11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's

risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum. plus value of subsequent Contract Modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Subsubcontractors in the Project.

- § 11.3.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss.
- § 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.
- § 11.3.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.
- § 11.3.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.
- § 11.3.1.5 Partial occupancy or use in accordance with Section 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

## § 11.3.2 BOILER AND MACHINERY INSURANCE

The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

#### § 11.3.3 LOSS OF USE INSURANCE

The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

- § 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.
- § 11.3.5 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section 11.3.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ 11.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.

# § 11.3.7 WAIVERS OF SUBROGATION

The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, subsubcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the subcontractors, subsubcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ 11.3.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

§ 11.3.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

§ 11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection is made, the dispute shall be resolved in the manner selected by the Owner and Contractor as the method of binding dispute resolution in the Agreement. If the Owner and Contractor have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or, in the case of a dispute over distribution of insurance proceeds, in accordance with the directions of the arbitrators.

# § 11.4 PERFORMANCE BOND AND PAYMENT BOND

§ 11.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

§ 11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

# ARTICLE 12 UNCOVERING AND CORRECTION OF WORK § 12.1 UNCOVERING OF WORK

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs.

#### § 12.2 CORRECTION OF WORK

#### § 12.2.1 BEFORE OR AFTER SUBSTANTIAL COMPLETION

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

## § 12.2.2 AFTER SUBSTANTIAL COMPLETION

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

- § 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.
- § 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.
- § 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- § 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.
- § 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

#### § 12.3 ACCEPTANCE OF NONCONFORMING WORK

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

# ARTICLE 13 MISCELLANEOUS PROVISIONS

## § 13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

# § 13.2 SUCCESSORS AND ASSIGNS

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

#### § 13.3 WRITTEN NOTICE

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

## § 13.4 RIGHTS AND REMEDIES

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

§ 13.4.2 No action or failure to act by the Owner, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach there under, except as may be specifically agreed in writing.

# § 13.5 TESTS AND INSPECTIONS

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

§ 13.5.2 If the Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.5.3, shall be at the Owner's expense.

§ 13.5.3 If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Architect's services and expenses shall be at the Contractor's expense.

§ 13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.5.5 If the Architect is to observe tests, inspections or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

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

### § 13.6 INTEREST

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

## § 13.7 TIME LIMITS ON CLAIMS

The Owner and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7.

# ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT § 14.1 TERMINATION BY THE CONTRACTOR

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

.1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;

.2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;

.3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or

.4 The Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

#### § 14.2 TERMINATION BY THE OWNER FOR CAUSE

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the above reasons exist, the Owner, upon certification by the Initial Decision Maker that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

.2 Accept assignment of subcontracts pursuant to Section 5.4; and

.3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

# § 14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or

.2 that an equitable adjustment is made or denied under another provision of the Contract.

# § 14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

.1 cease operations as directed by the Owner in the notice;

.2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and

.3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

# ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 CLAIMS

§ 15.1.1 DEFINITION

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

# § 15.1.2 NOTICE OF CLAIMS

Claims by either the Owner or Contractor must be initiated by written notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker.

Claims by either party must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

# § 15.1.3 CONTINUING CONTRACT PERFORMANCE

Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Architect will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Initial Decision Maker.

#### § 15.1.4 CLAIMS FOR ADDITIONAL COST

If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

#### § 15.1.5 CLAIMS FOR ADDITIONAL TIME

§ 15.1.5.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.5.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

# § 15.1.6 CLAIMS FOR CONSEQUENTIAL DAMAGES

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

#### § 15.2 INITIAL DECISION

§ 15.2.1 Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Initial Decision Maker with no decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

- § 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.
- § 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.
- § 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.
- § 15.2.6.1 Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.
- § 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.
- § 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

#### § 15.3 MEDIATION

- § 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 shall be subject to mediation as a condition precedent to binding dispute resolution.
- § 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.
- § 15.3.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

#### § 15.4 ARBITRATION

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

- § 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.
- § 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.
- § 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

## § 15.4.4 CONSOLIDATION OR JOINDER

- § 15.4.4.1 Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).
- § 15.4.4.2 Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.
- § 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Contractor under this Agreement.

# SECTION 00 7300 SUPPLEMENTARY CONDITIONS

#### **PART 1 GENERAL**

#### 1.01 SUMMARY

- A. These Supplementary Conditions amend and supplement the General Conditions defined in Document 00 7200 General Conditions and other provisions of the Contract Documents as indicated below. Provisions that are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions that are defined in the General Conditions have the meanings assigned to them in the General Conditions.

#### PART 2 PRODUCTS - NOT USED

#### **PART 3 EXECUTION - NOT USED**

#### **MODIFICATIONS TO AIA A201**

#### 4.01 ARTICLE 2.2 -INFORMATION AND SERVICES REQUIRED OF THE OWNER

- A. Delete paragraph 2.2.5 and replace with the following:
  - 2.2.5 The Contractor will be furnished free of charge a total of (5) sets of Contract Drawings and Project Manual. Additional sets will be furnished at the cost of reproduction, postage and handling.

#### 4.02 ARTICLE 3.4 - LABOR AND MATERIALS

- A. Add the following paragraphs:
  - 3.4.3 After the Contract has been executed, the Owner and the Architect will
    consider a formal request for the substitution of products in place of those
    specified only under the conditions set forth in the General Requirements
    (Division 1 of the Specifications).
  - 2. 3.4.4 By making requests for substitutions based on Subparagraph 3.4.3 above, the Contractor:
    - represents that the Contractor has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified.
    - represents that the Contractor will provide the same warranty for substitution that the Contractor would for that specified;
    - certifies that the cost data presented is complete and includes all related costs under this Contract except that Architect's redesign costs, and waives all claims additional costs related to the substitution which subsequently become apparent; and
    - will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be completed in all respects.

#### 4.03 ARTICLE 3.9 - ON-SITE JOB SUPERINTENDENT

- A. Add the following paragraph(s):
  - 1. 3.9.1. The minimum requirements for the on-site job superintendent for this project are as follows:
    - Five (5) years of documented experience as an on-site JOB SUPERINTENDENT.
    - Three (3) completed projects of similar project scope, square footage, construction cost, and complexity.
    - c. When requested, provide the name of the three above referenced projects, Owner's name and contact information, and project Architect's name and contact information.

## 4.04 ARTICLE 5 - SUBCONTRACTORS

- A. Add the following paragraph:
  - 5.2.1.1 Not later than 15 days after the date of NOTICE TO PROCEED, the
    Contractor shall furnish in writing to the Architect the names of persons or
    entities proposed as manufacturers for each of the product identified in the
    General Requirements (Division 1 of the Specifications) and, where applicable,
    the names of the installing Subcontractor.

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

- A. Add the following paragraph 7.1.4:
  - 7.1.4 References to the contractor calculating overhead and profit as part of Change Orders, Construction Change Directives and/ or Minor Change in the Work shall be replaced with the following maximum allowances:
    - For the Contractor, for Work performed by the Contractor's own forces,
       15 percent of the cost.
    - b. For the Contractor, for Work performed by the Contractor's Subcontractor, 10 percent of the amount due the Subcontractor.
    - For each Subcontractor or Sub-subcontractor involved, for Work performed by that Subcontractor's or Sub-subcontractor's own forces, 10 percent of the cost.
    - For each Subcontractor, for Work performed by the Subcontractor's Sub-subcontractors, 10 percent of the amount due the Subsubcontractor.
    - e. Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 7.3.6.
    - f. In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major costs items are Subcontracts, they shall be itemized also. In no case will a change involving over \$250 be approved without such itemization.

## 4.06 ARTICLE 8 - TIME

A. Add the following subparagraph:

1. 8.1.5: Contract Time is identified in Section 004200 - Bid Proposal Form.

#### 4.07 ARTICLE 9.3 - APPLICATIONS FOR PAYMENT

- A. Add the following to paragraph to 9.3.1.:
  - 1. The form of Application for Payment shall be notarized AlA Document G702, Application and Certification for Payment, supported by AlA Document G703, Continuation Sheet. Retainage shall comply with ACA 22-9-601.
  - 2. 9.3.1.4 contractor shall submit 5 copies of Application for Payment.

#### 4.08 ARTICLE 9.6 - PROGRESS PAYMENTS

- A. Add the following:
  - The Owner may nullify the whole or any part of any Certificate for Payment previously issued, to such extend as may be necessary in its opinion to protect the Owner from loss because of:
    - a. When periodic payments are made, then five percent (5%) will be withheld in accordance with Arkansas Code Annotated 22-9-601 et. seq.;
    - Defective work not remedied;
    - Third party claims filed or reasonable evidence indicating problem filing to such claims;
    - d. Failure of the contractor to make payments properly to subcontractors or for labor, materials, or equipment, also see A2-12.2;
    - e. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum.
    - Damage to the Owner or another contractor;
    - Reasonable evidence that the work will not be completed within the contract time; or
    - h. Persistent failure to carry out the work in accordance with the contract documents.

## 4.09 ARTICLE 9.7 - FAILURE OF PAYMENT

A. Delete paragraph 9.7.1.

#### 4.10 ARTICLE 10.2 - SAFETY OF PERSONS AND PROPERTY

- A. Add the following paragraph:
  - 10.2.4.1 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary, the Contractor shall give the Owner reasonable advance notice.

#### 4.11 ARTICLE 11.1 - CONTRACTOR'S LIABILITY INSURANCE

- A. Refer to 11.1.1.
  - In the fourth line following the word "located" insert the words "to which the Owner has no objections".
- B. Refer to 11.1.1.8
  - Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:
    - a. Premises Operations (including X, C, and U coverage's as applicable).

- b. Independent Contractor's Protective.
- Products and Completed Operations.
- d. Personal Injury Liability with Employment Exclusion deleted.
- e. Contractual, including specified provisions for Contractor's obligation under Paragraph 3.18.
- f. Owned, non-owned and hired motor vehicles.
- Broad Form Property Damage including Completed Operations.

## C. Refer to 11.1.1.9

 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Subparagraph 9.10.2.

#### D. Refer to 11.1.2

- Add the following paragraph
  - a. 11.1.2.1 The Insurance required by Subparagraph 11.1.1 shall be written for not less than the following limits, or greater if required by law:
    - 1) Workmen's Compensation Statutory Requirements.
    - Comprehensive General Liability Insurance shall be maintained with aggregate limit of not less than \$2,000,000.00.
    - Comprehensive Automobile Liability Insurance \$500,000.00 combined single limit for both Bodily Injury and Property Damage.
    - 4) Owner's and Contractor's Protective Liability Insurance shall be maintained with aggregate limit not less than \$2,000,000.00, with Architect as additional insured.
  - 11.1.2.2 Furnish Certificates of Insurance, AIA Documents G705, three copies, showing required insurance is in force before starting contract work. Furnish copies of subsequent endorsements amending coverage or limits.

## 4.12 ARTICLE 11.3 - PROJECT MANAGEMENT PROTECTIVE LIABILITY INSURANCE

- A. Add the following paragraphs:
  - 11.3.1.2 The General Contractor shall effect and maintain insurance provide in this Article as the interest of the Owner and Contractor may appear. Said insurance in a Company or Companies to which the Owner has no reasonable objection, shall include coverage for damage resulting from vandalism and malicious mischief in the amount of 100%.

## 4.13 ARTICLE 11.4 - PROPERTY INSURANCE

- A. Add the following sentence to paragraph 11.4.1.1.
  - The form of policy for this coverage shall be Completed Value.
- B. Delete paragraph 11.4.1.4, and replace with the following:
  - 11.3.1.4 The Contractor shall provide insurance coverage for portions of the Work stored off the site after written approval of the Owner at the value established in the approval, and also for portions of the Work in transit.

## 4.14 ARTICLE 11.5 - PERFORMANCE BOND AND PAYMENT BOND

- A. Delete Subparagraph 11.5.1 and substitute the following:
  - 11.5.1 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through the Contractor's usual source and the cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to 100 percent of the Contract Sum.
  - 2. 11.5.1.1 Failure to deliver bond shall be considered abandonment of the Contract and Bid Security shall be retained as liquidated damages. The bond shall comply with the laws of the State: shall be written by a Surety Company authorized to do business in the State and approved by the Owner. The bond shall be written in favor of the Owner. The contractor shall file the bond with the Circuit Clerk and recorder of the County in which the work is to be performed. The contractor shall provide evidence that the bonds have been filed.
  - 11.4.1.2 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.
- B. Add the following subparagraph:

#### 4.15 ARTICLE 14.4 - TERMINATION BY THE OWNER FOR CONVENIENCE

- A. Revise Subparagraph 14.4.3 as follows:
  - 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment from the Owner on the same basis provided in Subparagraph 14.1.2.

**END OF DOCUMENT** 

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# SECTION 00 8250 LIQUIDATED DAMAGES

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Time of Substantial Completion.
  - Bidder fully agrees to commence Work within ten (10) days of the Notice to Proceed from the Owner and to fully complete the Work in the time stated on the Bid Proposal Form.

#### 1.02 RELATED SECTIONS

- A. Section 001100 Invitation for Bids: Base Bid Proposal.
- B. Section 001150 Supplementary Invitation for Bids
- C. Section 007200 General Conditions: Article 8 Time.

### 1.03 LIQUIDATED DAMAGES

A. Liquidated damages imposed against the contractor for failure to meet the final agreed upon completion date will be \$200.00 for each workday beyond the final agreed upon completion date. The contractor shall be relieved of delays due to causes beyond his control such as Acts of God, national emergency, strikes, or fire. The contractor must notify the District Contracting Official in writing, on a timely basis, of such developments stating reason, justification and extent of delay. Weather days will be allowed to be used at the discretion of the contractor and the use of each weather day must be documented and filed with the District Contract Official within 10 days of such use. Weather days will be in accordance with the average inclement weather days as recorded by the National Weather Bureau for the geographical area of the contract.

## 1.04 EXTENSION OF TIME

- A. Extension of time will be considered in accordance with the General Conditions for circumstances beyond the General Contractor's control.
- B. No damages will be assessed for parts of days.

# 1.05 DISTRIBUTION OF DAMAGES

- A. The amount of distribution of damages to each contractor or material supplier is at the discretion of the General Contractor.
- B. The General Contractor must bind each of his Sub-Contractors to the same requirements that the General Contractor is bound to the Owner.

## 1.06 LEGAL HOLIDAYS

- Legal Holidays as observed by this Agreement.
  - New Year's Day.
  - 2. Memorial Day.
  - 3. Independence Day.
  - Labor Day.
  - Thanksgiving Day.
  - Day after Thanksgiving Day.

- 7. Christmas Day.
- B. No other days will be considered. No site visits will be furnished on legal holidays, Saturdays, or Sundays by the Architect or Engineers.

**PART 2 PRODUCTS - NOT USED** 

**PART 3 EXECUTION - NOT USED** 

**END OF SECTION** 

# SECTION 01 1000 SUMMARY

#### PART 1 GENERAL

#### 1.01 PROJECT

- A. Project Name: Complex 4 Concession Building, Joe Mack Campbell Park
- B. Owner's Name: City of Jonesboro Parks & Recreation
- C. Architect's Name: Fisher Arnold, Inc.
- D. Project Scope of Work:
  - Scope of work consists of a new Concession Building at Complex 4 at the
    Jonesboro Joe Mack Campbell Park sport complex. Work includes site
    preparation, concrete pavement removal and replacement, concrete footings,
    concrete slab-on-grade, load bearing concrete masonry units, pre-fabricated
    wood roof trusses, standing seam metal roof panels on plywood roof deck,
    painting, floor coverings, hollow metal doors and frames, door hardware,
    aluminum windows, and painted steel railings. Work includes complete HVAC,
    plumbing, and electrical work.
  - Exterior site work as required by Geotechnical Report and as shown on Site Plan drawing.

#### 1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 005200 - Agreement Form.

## 1.03 WORK BY OWNER

- A. Jonesboro Public Works will supply and install the following:
  - Relocation of existing public sanitary sewer and manholes

#### 1.04 OWNER OCCUPANCY

- Owner intends to occupy the Project upon Substantial Completion of the Project.
- B. Cooperate with City of Jonesboro Parks & Recreation to minimize conflict and to facilitate City of Jonesboro Park & Recreation's daily operations in adjacent areas.

#### 1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas designated by the Owner for Project construction, materials, equipment storage, and parking.
- B. Arrange use of site and premises to allow:
  - 1. Work by Others.
  - Work by City of Jonesboro.
- C. Provide access to and from site as required by law and by City of Jonesboro Parks & Recreation:
  - Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.

- D. Existing building spaces may not be used for storage.
- E. Time Restrictions:
  - Limit conduct of especially noisy exterior work to the hours of 6:00 7:00 a.m. and 3:00 - 8:00 p.m.
- F. Utility Outages and Shutdown:
  - Limit disruption of utility services to hours the school is unoccupied.
  - Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days' notice to City of Jonesboro Parks & Recreation and authorities having jurisdiction.
  - 3. Prevent accidental disruption of utility services to other facilities.

## **PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED** 

**END OF SECTION** 

# SECTION 01 2000 PRICE AND PAYMENT PROCEDURES

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum.
- C. Documentation of changes in Contract Time.
- D. Change procedures.
- E. Correlation of Contractor submittals based on changes.
- F. Procedures for preparation and submittal of application for final payment.

#### 1.02 RELATED REQUIREMENTS

- Document 00 5200 Agreement Form: Contract Sum, retainages, payment period, monetary values of unit prices.
- B. Document 00 7200 General Conditions and Document 00 7300 Supplementary Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- Document 00 7300 Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.
- Section 01 2200 Unit Prices: Monetary values of unit prices, payment and modification procedures relating to unit prices.

## 1.03 SCHEDULE OF VALUES

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Fisher Arnold, Inc. for approval.
- Forms filled out by hand will not be accepted.
- C. Submit a printed schedule on AlA Form G703 Application and Certificate for Payment Continuation Sheet. Contractor's standard form or electronic media printout will be considered.
- D. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.
- E. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification Section. Identify site mobilization and bonds and insurance.
- F. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- G. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- H. Revise schedule to list approved Change Orders, with each Application For Payment.

## 1.04 APPLICATIONS FOR PROGRESS PAYMENTS

A. Payment Period: Submit at intervals stipulated in the Agreement.

- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Fisher Arnold, Inc. for approval.
- C. Forms filled out by hand will not be accepted.
- D. Present required information in typewritten form.
- E. Form: AlA G702 Application and Certificate for Payment and AlA G703 Continuation Sheet including continuation sheets when required.
- F. For each item, provide a column for listing each of the following:
  - 1. Item Number.
  - Description of work.
  - 3. Scheduled Values.
  - 4. Previous Applications.
  - 5. Work in Place and Stored Materials under this Application.
  - 6. Authorized Change Orders.
  - Total Completed and Stored to Date of Application.
  - 8. Percentage of Completion.
  - Balance to Finish.
  - 10. Retainage.
- G. Execute certification by signature of authorized officer.
- H. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored Products.
- List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- Submit three copies of each Application for Payment.
- K. Include the following with the application:
  - 1. Transmittal letter as specified for Submittals in Section 01 3000.
  - Construction progress schedule, revised and current as specified in Section 01 3000.
    - a. Written request for proposed changes in Contract Time, along with supporting data that would substantiate such request.
  - 3. Partial release of liens from major Subcontractors and vendors.
  - 4. Affidavits attesting to off-site stored products.
- L. When Fisher Arnold, Inc. requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

#### 1.05 MODIFICATION PROCEDURES

- A. For minor changes not involving an adjustment to the Contract Price or Contract Time, Fisher Arnold, Inc. will issue instructions directly to Contractor.
- B. Fisher Arnold, Inc. will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract Time as authorized by the Conditions of the Contract by issuing supplemental instructions on AIA Form G710.
- C. For other required changes, Fisher Arnold, Inc. will issue a document signed by City of Jonesboro Parks & Recreation instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  - The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
  - Promptly execute the change.

- D. For changes for which advance pricing is desired, Fisher Arnold, Inc. will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 5 days.
- E. May propose a change by submitting a request for change to Fisher Arnold, Inc., describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 6000.
- F. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
  - For change requested by Fisher Arnold, Inc. for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
  - For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Fisher Arnold, Inc.
  - For pre-determined unit prices and quantities, the amount will based on the fixed unit prices.
  - For change ordered by Fisher Arnold, Inc. without a quotation from Contractor, the amount will be determined by Fisher Arnold, Inc. based on the Contractor's substantiation of costs as specified for Time and Material work.
- G. Substantiation of Costs: Provide full information required for evaluation.
  - 1. On request, provide the following data:
    - a. Quantities of products, labor, and equipment.
    - Taxes, insurance, and bonds.
    - c. Overhead and profit.
    - d. Justification for any change in Contract Time.
    - e. Credit for deletions from Contract, similarly documented.
  - 2. Support each claim for additional costs with additional information:
    - a. Origin and date of claim.
    - b. Dates and times work was performed, and by whom.
    - Time records and wage rates paid.
    - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
  - For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- H. Execution of Change Orders: Fisher Arnold, Inc. will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- J. Promptly revise progress schedules to reflect any change in Contract Time, revise subschedules to adjust times for other items of work affected by the change, and resubmit.
- K. Promptly enter changes in Project Record Documents.

# 1.06 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
  - 1. All closeout procedures specified in Section 01 7000.

**PART 2 PRODUCTS - NOT USED** 

**PART 3 EXECUTION - NOT USED** 

**END OF SECTION** 

# SECTION 01 2100 ALLOWANCES

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- Cash allowances.
- B. Contingency allowance.
- Payment and modification procedures relating to allowances.

#### 1.02 RELATED REQUIREMENTS

 Section 01 2000 - Price and Payment Procedures: Additional payment and modification procedures.

#### 1.03 CASH ALLOWANCES

- A. Costs Not Included in Cash Allowances (include these costs in the Base Bid): Product delivery to site and handling at the site, including unloading, uncrating, and storage; protection of products from elements and from damage; and labor for installation and finishing.
- B. Fisher Arnold, Inc. responsibilities:
  - Consult with Contractor for consideration and selection of products, suppliers, and installers.
  - Select products in consultation with City of Jonesboro Parks & Recreation and transmit decision to Contractor.
- C. Contractor Responsibilities:
  - 1. Assist Fisher Arnold, Inc. in selection of products, suppliers, and installers.
  - Obtain proposals from suppliers and installers and offer recommendations.
  - 3. On notification of which products have been selected, execute purchase agreement with designated supplier and installer.
  - Arrange for and process shop drawings, product data, and samples. Arrange for delivery.
- D. Provide copies of product purchase invoices and applicable Overhead, Bond and Profit amounts to Architect. Differences in costs will be adjusted by Change Order.

## 1.04 CONTINGENCY ALLOWANCE

- A. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
- B. Funds will be drawn from the Contingency Allowance only by Change Order.
- C. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

## 1.05 ALLOWANCES SCHEDULE

A. Porcelain Tile and Colored Grout Allowance: Include the lump sum of \$7.00 per square foot for the purchase of porcelain tile and colored grout from the supplier. The cost of contractor mark-up, accessories, taxes, delivery, and installation is to be included in the Base Bid. B. The General Contractor shall include in the Stipulated Contract Price the sum of \$20,000.00 as a contingency for unforeseen changes in the scope of work. These funds will only be used for approved change orders to the contract. Any monies not designated for approved Change Orders will be deducted from the contract base bid at the completion of the contract.

**PART 2 PRODUCTS - NOT USED** 

**PART 3 EXECUTION - NOT USED** 

**END OF SECTION** 

# SECTION 01 2200 UNIT PRICES

#### **PART 1 GENERAL**

# 1.01 SECTION INCLUDES

- A. List of unit prices, for use in preparing Bids.
- Measurement and payment criteria applicable to Work performed under a unit price payment method.
- Defect assessment and non-payment for rejected work.

#### 1.02 COSTS INCLUDED

A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

#### 1.03 UNIT QUANTITIES SPECIFIED

A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

#### 1.04 MEASUREMENT OF QUANTITIES

- A. Measurement methods delineated in the individual specification sections complement the criteria of this section. In the event of conflict, the requirements of the individual specification section govern.
- B. Take all measurements and compute quantities. Measurements and quantities will be verified by Fisher Arnold, Inc.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.
- D. Measurement Devices:
  - Weigh Scales: Inspected, tested and certified by the applicable state Weights and Measures department within the past year.
  - Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
  - Metering Devices: Inspected, tested and certified by the applicable State department within the past year.
- E. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
- F. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness, in-place and compacted as a completed unit of work.
- G. Measurement by Area: Measured by square dimension using mean length and width or radius.
- H. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
- Stipulated Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.
- J. Perform surveys required to determine quantities, including control surveys to establish measurement reference lines. Notify Fisher Arnold, Inc. prior to starting work.
- K. Engineer Responsibilities: Sign surveyor's field notes or keep duplicate field notes, calculate and certify quantities for payment purposes.

### 1.05 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Fisher Arnold, Inc., multiplied by the unit price.
- B. Payment will not be made for any of the following:
  - Products wasted or disposed of in a manner that is not acceptable.
  - Products determined as unacceptable before or after placement.
  - Products not completely unloaded from the transporting vehicle.

- Products placed beyond the lines and levels of the required Work.
- Products remaining on hand after completion of the Work.
- Loading, hauling, and disposing of rejected Products.

#### 1.06 DEFECT ASSESSMENT

- Replace Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of Fisher Arnold, Inc., it is not practical to remove and replace the Work, Fisher Arnold, Inc. will direct one of the following remedies:
  - The defective Work may remain, but the unit price will be adjusted to a new unit price at the discretion of Fisher Arnold. Inc.
  - The defective Work will be partially repaired to the instructions of the Fisher Arnold, Inc., and the unit price will be adjusted to a new unit price at the discretion of Fisher Arnold, Inc.
- C. If, in the opinion of the Owner, it is not practical to remove and replace the Work, the Owner will direct one of the following remedies:
  - The defective Work may remain, but the unit price will be adjusted to a new unit price at the discretion of the Owner.
  - The defective Work will be partially repaired to the instructions of the Owner, and the unit price will be adjusted to a new unit price at the discretion of the Owner.
- D. The individual specification sections may modify these options or may identify a specific formula or percentage price reduction.
- E. The authority of the Owner to assess the defect and identify payment adjustment is final.

**PART 2 PRODUCTS - NOT USED** 

**PART 3 EXECUTION - NOT USED** 

**END OF SECTION** 

# SECTION 01 3000 ADMINISTRATIVE REQUIREMENTS

#### PART 1 GENERAL

# 1.01 SECTION INCLUDES

- Preconstruction meeting.
- Site mobilization meeting.
- C. Progress meetings.
- D. Construction progress schedule and proposed changes to Contract Time.
- E. Progress photographs.
- F. Coordination drawings.
- G. Submittals for review, information, and project closeout.
- Number of copies of submittals.
- Submittal procedures.

#### 1.02 RELATED REQUIREMENTS

- A. Document 00 7200 General Conditions: Dates for applications for payment.
- Section 01 3216 Construction Progress Schedule: Form, content, and administration of schedules.
- C. Section 01 3300 Weather Delays
- Section 01 7000 Execution and Closeout Requirements: Additional coordination requirements.
- E. Section 01 7800 Closeout Submittals: Project record documents.

#### 1.03 PROJECT COORDINATION

- A. Project Coordinator: Construction Manager.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for construction access, traffic, and parking facilities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.
- Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- G. Make the following types of submittals to Fisher Arnold, Inc. through the Project Coordinator:
  - Requests for interpretation.
  - Requests for substitution.
  - 3. Shop drawings, product data, and samples.
  - Test and inspection reports.
  - Design data.
  - Manufacturer's instructions and field reports.
  - Applications for payment and change order requests.
  - 8. Progress schedules.
  - Coordination drawings.
  - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
  - 11. Closeout submittals.

## PART 2 PRODUCTS - NOT USED

## PART 3 EXECUTION

# 3.01 PRECONSTRUCTION MEETING

- Construction Manager will schedule a meeting after Notice of Award.
- B. Attendance Required:
  - City of Jonesboro Parks & Recreation.

- 2. Fisher Arnold, Inc.
- Construction Manager and Project Superintendent.
- All Major Subcontractors.
- C. Agenda:
  - Execution of City of Jonesboro Parks & Recreation -- General Contractor Agreement.
  - Submission of executed bonds and insurance certificates.
  - 3. Distribution of Contract Documents.
  - Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
  - Designation of personnel representing the parties to Contract, City of Jonesboro Parks & Recreation, Fisher Arnold, Inc.
  - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
  - Scheduling.
- D. Construction Manager to record minutes and distribute copies within two days after meeting to participants, with two copies to Fisher Arnold, Inc., City of Jonesboro Parks & Recreation, participants, and those affected by decisions made.

#### 3.02 SITE MOBILIZATION MEETING

- A. Project Coordinator will schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
  - Construction Manager.
  - 2. City of Jonesboro Parks & Recreation.
  - Fisher Arnold, Inc.
  - 4. Project Superintendent.
  - Major Subcontractors.
  - Others as required by Construction Manager.
- C. Agenda:
  - Use of premises by City of Jonesboro Parks & Recreation.
  - City of Jonesboro Parks & Recreation requirements and occupancy prior to completion.
  - Construction facilities and controls provided by City of Jonesboro Parks & Recreation.
  - 4. Temporary utilities provided by City of Jonesboro Parks & Recreation.
  - Survey and site layout.
  - Security and housekeeping procedures.
  - Schedules.
  - 8. Application for payment procedures.
  - Procedures for testing.
  - Procedures for maintaining record documents.
  - Requirements for start-up of equipment.
  - Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Fisher Arnold, Inc., City of Jonesboro Parks & Recreation, participants, and those affected by decisions made.

# 3.03 PROGRESS MEETINGS

- Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Construction Manager, Job superintendent, major Subcontractors, City of Jonesboro Parks & Recreation, Fisher Arnold, Inc., as appropriate to agenda topics for each meeting.
- D. Agenda:
  - Review minutes of previous meetings.
  - 2. Review of Work progress.
  - Field observations, problems, and decisions.
  - Identification of problems that impede, or will impede, planned progress.

- Review of submittals schedule and status of submittals.
- Review of off-site fabrication and delivery schedules.
- Maintenance of progress schedule.
- Corrective measures to regain projected schedules.
- Planned progress during succeeding work period.
- Coordination of projected progress.
- 11. Maintenance of quality and work standards.
- 12. Effect of proposed changes on progress schedule and coordination.
- 13. Other business relating to Work.
- E. Construction Manager to record minutes and distribute copies within two days after meeting to participants, with two copies to Fisher Arnold, Inc., City of Jonesboro Parks & Recreation participants, and those affected by decisions made.

#### 3.04 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- Refer to Section 01 3216 Construction Progress Schedule.

#### 3.05 PROGRESS PHOTOGRAPHS

- A. Submit new photographs at least once each week, within 3 days after exposure, documenting progress made the previous week.
- B. Photography Type: Digital; electronic files.
- C. In addition to periodic, recurring views, take photographs of each of the following events:
  - Completion of site clearing.
  - Excavations in progress.
  - Foundations in progress and upon completion.
  - Structural framing in progress and upon completion.
  - Enclosure of building, upon completion.
  - Final completion, minimum of ten (10) photos.

#### D. Views:

- Provide non-aerial photographs from four cardinal views at each specified time, until Date of Substantial Completion.
- 2. Consult with Fisher Arnold, Inc. for instructions on views required.
- 3. Provide factual presentation.
- Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
- E. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
  - 1. Delivery Medium: Via email.
  - File Naming: Include project identification, date and time of view, and view identification.

#### 3.06 COORDINATION DRAWINGS

Review drawings prior to submission to Fisher Arnold, Inc.

#### 3.07 SUBMITTALS FOR REVIEW

- A. Submittals shall be transmitted in electronic digital format (pdf) via email or other transmitting service as determined by Fisher Arnold, Inc. at time of beginning construction.
- B. When requested by Fisher Arnold, Inc., provide paper copies of specified submittals.
- C. When the following are specified in individual sections, submit them for review:
  - 1. Product data.
  - Shop drawings.
  - Samples for selection.
  - Samples for verification.
- D. Project Manager shall review, correct, and sign stamped approval of all submittals as conforming with standards and design set forth in Contract Documents, prior to submission to Fisher Arnold, Inc.

- E. Submit to Fisher Arnold, Inc. for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- F. Samples will be reviewed only for aesthetic, color, or finish selection.
- G. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 – Closeout Submittals.

#### 3.08 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
  - Design data.
  - Certificates.
  - Test reports.
  - Inspection reports.
  - Manufacturer's instructions.
  - Manufacturer's field reports.
  - Other types indicated.
- B. Submit for Fisher Arnold, Inc.'s knowledge as contract administrator or City of Jonesboro Parks & Recreation. No action will be taken.

#### 3.09 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. Refer to paragraph 3.01 Electronic Document Submittal Service above.
- D. When the following are specified in individual sections, submit them at project closeout:
  - Project record documents.
  - Operation and maintenance data.
  - Warranties.
  - 4. Bonds.
  - Other types as indicated.
- E. Submit for City of Jonesboro Parks & Recreation's benefit during and after project completion.

#### 3.10 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Documents for Project Closeout: Make one reproduction of submittal originally reviewed. Submit one extra of submittals for information.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Fisher Arnold, Inc.
  - After review, produce duplicates.
  - 2. Retained samples will not be returned to Contractor unless specifically so stated.

# 3.11 SUBMITTAL PROCEDURES

- A. Shop Drawing Procedures:
  - Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
  - Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- B. Transmit each submittal with a copy of approved submittal form.
- C. Transmit each submittal with approved form.
- Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- E. Identify Project, Construction Manager, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- F. Manager's review stamp, dated and signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents, must be affixed to each submittal.
- G. Deliver samples and physical submittals to Fisher Arnold, Inc. at its business address.

- H. Schedule submittals to expedite the Project, and coordinate submission of related items.
- For each submittal for review, allow 15 working days excluding delivery time to and from the Construction Manager.
- J. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- K. Provide space for Construction Manager and Fisher Arnold, Inc. review stamps.
- L. When revised for resubmission, identify all changes made since previous submission.
- M. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- N. Submittals not requested will not be recognized or processed.

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# SECTION 01 3216 CONSTRUCTION PROGRESS SCHEDULE

#### PART1 GENERAL

# 1.01 SECTION INCLUDES

- Preliminary schedule.
- B. Construction progress schedule, bar chart type.

#### 1.02 RELATED SECTIONS

A. Section 01 1000 - Summary: Work sequence.

# 1.03 REFERENCES

 AGC (CPSM) - Construction Planning and Scheduling Manual; Associated General Contractors of America; 2004.

#### 1.04 SUBMITTALS

- A. Within 10 days after date of Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
  - Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.
  - Proposed changes in Contract Time.
    - Proposed changes in contract Time are to be submitted in writing monthly.
    - Fully describing the reasons for the change and effect of the change on the construction schedule, and attach a revised Progress Schedule.
    - c. For a change based on weather-related delay, provide and attach weather data from National Oceanic and Atmospheric Administration (NOAA) as an impartial basis for determining justifiable extensions, or daily work logs which describe actual local weather conditions and impact, subject to approval by Designer. Provide and attach NOAA comparative data on normals, means, and extremes in not already provided in Project Manual.
    - d. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- F. Submit the number of opaque reproductions that Construction Manager requires, plus two copies which will be retained by Fisher Arnold, Inc.
- G. Submit under transmittal letter form specified in Section 01 3000 Administrative Requirements.

#### 1.05 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
- B. Diagram Sheet Size: Maximum 22 x 17 inches or width required.
- C. Sheet Size: Multiples of 8-1/2 x 11 inches.
- D. Scale and Spacing: To allow for notations and revisions.

#### PART 2 PRODUCTS - NOT USED

#### PART 3 EXECUTION

#### 3.01 PRELIMINARY SCHEDULE

Prepare preliminary schedule in the form of a horizontal bar chart.

#### 3.02 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- Identify each item by specification section number.
- Identify work of separate stages and other logically grouped activities.
- Provide sub-schedules for each stage of Work identified in Section 01 1000.
- E. Provide sub-schedules to define critical portions of the entire schedule.
- F. Include conferences and meetings in schedule.
- G. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- H. Provide separate schedule of submittal dates for shop drawings, product data, and samples, owner-furnished products, Products identified under Allowances, and dates reviewed submittals will be required from Fisher Arnold, Inc. Indicate decision dates for selection of finishes.
- Indicate delivery dates for owner-furnished products.
- J. Coordinate content with schedule of values specified in Section 01 2000 Price and Payment Procedures.
- K. Provide legend for symbols and abbreviations used.

#### 3.03 BAR CHARTS

- Include a separate bar for each major portion of Work or operation.
- B. Identify the first work day of each week.

#### 3.04 REVIEW AND EVALUATION OF SCHEDULE

- Participate in joint review and evaluation of schedule with Fisher Arnold, Inc. at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise as necessary as result of review, and resubmit within 10 days.

## 3.05 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit reports required to support recommended changes.
- G. Provide narrative report to define problem areas, anticipated delays, and impact on the schedule. Report corrective action taken or proposed and its effect including the effects of changes on schedules of separate contractors.

# 3.06 DISTRIBUTION OF SCHEDULE

- A. Distribute copies of updated schedules to Construction Manager's project site file, to Subcontractors, suppliers, Fisher Arnold, Inc., City of Jonesboro Parks & Recreation, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

# SECTION 01 3300 WEATHER DELAYS

#### **PART 1 GENERAL**

### 1.01 EXTENSIONS OF CONTRACT TIME

A. If the basis exists for an extension of time in accordance with paragraph 8.3 of the Conditions, an extension of item on the basis of weather may be granted only for the number of Weather Delay Days in excess of the number of days listed as the Standard Baseline for that month.

## 1.02 STANDARD BASELINE FOR AVERAGE CLIMATIC RANGE

- A. The Owner has reviewed weather data available from the National Oceanic and Atmospheric Administration and determined at Standard Baseline of average climatic range for the State of Arkansas.
- B. Standard Baseline shall be regarded as the normal and anticipatable number of calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of adverse weather.
- Suspension of construction activity for the number of days each month as listed in the standard baseline is included in the work and is not eligible for extension of contract time.
- C. Standard Baseline is as follows:

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
12	11	8	7	7	6	7	5	4	5	6	11

#### 1.03 ADVERSE WEATHER AND WEATHER DELAY DAYS

- Adverse Weather is defined as the occurrence of one or more of the following conditions
  which prevents exterior construction activity or access to the site within twenty-four (24) hours:
- Precipitation (rain, snow, or ice) in excess of one-tenth inch (0.10") liquid measure
- Temperatures that do not rise above 32 degrees F. by 10:00 a.m.
- Temperatures that do not rise above that specified for the days construction activity by 10:00
  a.m., if any is specified.
- 4. Sustained wind in excess of twenty-five (25) miles per hour.
- Standing snow in excess of one inch (1.00")
- B. Adverse Weather may include, if appropriate, "dry-out" or "mud" days when all the following conditions are met:
- For rain days above the standard baseline.
- Only if there is a hindrance to site access to Work, such as excavation, backfill, and footings.
- At a rate no greater than 1 make-up day for each day or consecutive rain days beyond the standard baseline that total 1 inch or more, liquid measure, unless specifically recommended otherwise by the Designer.
- C. A Weather Delay Day may be counted if adverse weather prevents work on the project for fifty percent (50%) or more of the contractor's scheduled work day, including a weekend day or holiday if Contractor has scheduled construction activity that day.

#### 1.04 DOCUMENTATION AND SUBMITTALS

- A. Submit daily jobsite logs showing which and to what extent construction activities have been affected by weather on a monthly basis.
- B. Submit actual weather data to support claim for time extension obtained from nearest NOAA weather station or other independently verified source approved by Architect at beginning of project.
- C. Use Standard Baseline data provided in this Section when documenting actual delays due to weather in excess of the average climatic range.
- Organize claim and documentation to facilitate evaluation on a basis of calendar month periods, and submit in accordance with the procedures for Claims established in paragraph 4.3 of the Conditions.

E. If an extension of the Contract Time is appropriate, it shall be effected in accordance with the provisions of Article 7 of the Conditions, and the applicable General Requirements. **END OF SECTION** 

# SECTION 01 4000 QUALITY REQUIREMENTS

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- Quality assurance submittals.
- B. Mock-ups.
- C. Control of installation.
- D. Tolerances.
- E. Testing and inspection services.
- F. Manufacturers' field services.

# 1.02 RELATED REQUIREMENTS

- A. Document 00 3100 Available Project Information: Soil investigation data.
- B. Document 007200 General Conditions: Inspections and approvals required by public authorities.
- C. Section 01 3000 Administrative Requirements: Submittal procedures.
- D. Section 01 6000 Product Requirements: Requirements for material and product quality.

# 1.03 REFERENCE STANDARDS

- A. ASTM C1021 Standard Practice for Laboratories Engaged in Testing of Building Sealants;
   2008 (Reapproved 2014).
- ASTM C 1077 Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2007a.
- C. ASTM C 1093 Standard Practice for Accreditation of Testing Agencies for Masonry; 2007.
- D. ASTM D 3740 Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2004a.
- E. ASTM E 329 Standard Specification for Agencies Engaged Construction Inspection and/or Testing; 2007a.
- F. ASTM E 543 Standard Specification for Agencies Performing Nondestructive Testing: 2008.
- G. IAS AC89 Accreditation Criteria for Testing Laboratories; 2010.

#### 1.04 SUBMITTALS

- A. Testing Agency Qualifications:
- Prior to start of Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
- Test Reports: After each test/inspection, promptly submit two copies of report to Fisher Arnold, Inc. and to Contractor.
  - Include:
    - Date issued.
    - b. Project title and number.
    - Name of inspector.
    - Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - Type of test/inspection.
    - h. Date of test/inspection.
    - Results of test/inspection.
    - Conformance with Contract Documents.
    - k. When requested by Fisher Arnold, Inc., provide interpretation of results.
  - Test report submittals are for Fisher Arnold, Inc.'s knowledge as contract
    administrator for the limited purpose of assessing conformance with information given
    and the design concept expressed in the contract documents, or for City of
    Jonesboro Parks & Recreation's information.

- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Fisher Arnold, Inc., in quantities specified for Product Data.
  - Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the City of Jonesboro Parks & Recreation's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- E. Manufacturer's Field Reports: Submit reports for Fisher Arnold, Inc.'s benefit as contract administrator or for City of Jonesboro Parks & Recreation.
  - Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- F. Erection Drawings: Submit drawings for Fisher Arnold, Inc.'s benefit as contract administrator or for City of Jonesboro Parks & Recreation.
  - Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

#### 1.05 REFERENCES AND STANDARDS

### 1.06 TESTING AND INSPECTION AGENCIES

- Contractor shall employ and pay for services of an independent testing agency to perform specified testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- C. Contractor Employed Agency:
  - Testing agency: Comply with requirements of ASTM E 329, ASTM E 543, ASTM C 1021, ASTM C 1077, and ASTM C 1093.
  - Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
  - Laboratory Qualifications: Accredited by IAS according to IAS AC89.
  - Laboratory: Authorized to operate in Arkansas.
  - Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

#### PART 2 PRODUCTS - NOT USED

#### PART 3 EXECUTION

#### 3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- Should manufacturers' instructions conflict with Contract Documents, request clarification from Fisher Arnold, Inc. before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

# 3.02 MOCK-UPS

A. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.

- Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mock-ups shall be a comparison standard for the remaining Work.
- D. Where mock-up has been accepted by Fisher Arnold, Inc. and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mockup and clear area when directed to do so by Fisher Arnold, Inc.

#### 3.03 TOLERANCES

- Monitor fabrication and installation tolerance control of products to produce acceptable Work.
   Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Fisher Arnold, Inc. before proceeding.
- Adjust products to appropriate dimensions; position before securing products in place.

#### 3.04 TESTING AND INSPECTION

- A. Testing Agency Duties:
  - Provide qualified personnel at site. Cooperate with Fisher Arnold, Inc. and Contractor in performance of services.
  - Perform specified sampling and testing of products in accordance with specified standards.
  - Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 4. Promptly notify Fisher Arnold, Inc. and Contractor of observed irregularities or non-conformance of Work or products.
  - 5. Perform additional tests and inspections required by Fisher Arnold, Inc.
  - Submit reports of all tests/inspections specified.
- B. Limits on Testing/Inspection Agency Authority:
  - Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  - Agency may not approve or accept any portion of the Work.
  - Agency may not assume any duties of Contractor.
  - Agency has no authority to stop the Work.
- C. Contractor Responsibilities:
  - Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
  - Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
  - Provide incidental labor and facilities:
    - To provide access to Work to be tested/inspected.
    - To obtain and handle samples at the site or at source of Products to be tested/inspected.
    - c. To facilitate tests/inspections.
    - To provide storage and curing of test samples.
  - Notify Fisher Arnold, Inc. and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
  - Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  - Arrange with City of Jonesboro Parks & Recreation's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- D. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Fisher Arnold, Inc.
- Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.
- F. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Fisher Arnold, Inc. Payment for re-testing will be charged to the Contractor by deducting testing charges from the Contract Price.

#### 3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- Submit qualifications of observer to Fisher Arnold, Inc. 30 days in advance of required observations.
  - Observer subject to approval of Fisher Arnold, Inc.
  - Observer subject to approval of City of Jonesboro Parks & Recreation.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

#### 3.06 DEFECT ASSESSMENT

- Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of Fisher Arnold, Inc., it is not practical to remove and replace the Work, Fisher Arnold, Inc. will direct an appropriate remedy or adjust payment.

## **SECTION 01 5000**

## **TEMPORARY FACILITIES AND CONTROLS**

## PART 1 GENERAL

# 1.01 SECTION INCLUDES

- Temporary utilities.
- Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- Security requirements
- F. Vehicular access and parking.
- G. Waste removal facilities and services.
- H. Project identification sign.
- Field offices.

#### 1.02 RELATED REQUIREMENTS

A. Section 01 5813 - Temporary Project Signage.

#### 1.03 TEMPORARY UTILITIES

- A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes.
- Existing facilities may not be used.
- New permanent facilities may not be used.
- D. Use trigger-operated nozzles for water hoses, to avoid waste of water.

#### 1.04 TELECOMMUNICATIONS SERVICES

- Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
- B. Provide, maintain, and pay for cellular telephone service for the project superintendent.

#### 1.05 TEMPORARY SANITARY FACILITIES

- Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.
- C. At end of construction, return facilities to same or better condition as originally found.

#### 1.06 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- Provide barricades and covered walkways required by governing authorities for public rightsof-way and for public access to existing building.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

#### 1.07 FENCING

 Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

#### 1.08 SECURITY

- Provide security and facilities to protect Work, and City of Jonesboro Parks & Recreation's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with City of Jonesboro Parks & Recreation's security program.

#### 1.09 VEHICULAR ACCESS AND PARKING

- Coordinate access and haul routes with governing authorities and City of Jonesboro Parks & Recreation.
- B. Provide and maintain access to fire hydrants, free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.
- D. Designated existing on-site roads may be used for construction traffic.
- E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.
- F. Do not allow vehicle parking on existing pavement.

#### 1.10 WASTE REMOVAL

- Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically, and when specifically requested to do so by Fisher Arnold, Inc. or City of Jonesboro Parks & Recreation.

#### 1.11 PROJECT SIGNS - SEE SECTION 015813

# 1.12 FIELD OFFICES

- A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 8 persons.

### 1.13 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.
- E. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

#### **SECTION 01 5710**

# **EXCAVATION SAFETY PROCEDURES**

# **PART 1 GENERAL**

A.

#### 1.01 SCOPE

In accordance with Arkansas Code Annotated 22-9-212, the contractor shall include a separate pay item for trench or excavation safety systems for any trench or excavation which equals or exceeds five (5) feet in depth and this pay item shall be a part of the contract price.

#### **PART 2 PRODUCTS**

# 2.01 MATERIALS

A. All materials used must meet OSHA regulations

### PART 3 EXECUTION

# 3.01 METHODOLOGY

- A. It is the contractor's responsibility to comply with regulations for excavation safety systems.
- B. The Occupational Safety and Health Administration (OSHA) Standard for Excavation and Trenches Safety System 29 CFR 1926, Subpart P is hereby incorporated into this Project Manual following this section.

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#### **SECTION 01 5713**

#### TEMPORARY EROSION/SEDIMENTATION CONTROL

#### **PART 1 GENERAL**

# 1.01 SCOPE

- A. Under regulation of the Department of Pollution Control and Ecology, the owner shall be responsible for implementing pollution control methods for controlling storm water run-off from the construction site.
- B. The contractor, under this construction contract, is responsible for implementation and maintenance of all pollution control methods required in this specification section. The contractor is to perform all work, in the owner's interest, required by ADEQ to control storm water run-off from the construction site.

#### 1.02 SECTION INCLUDES

- A. Prevention of erosion due to construction activities.
  - Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
  - Restoration of areas eroded due to insufficient preventive measures.
- B. Compensation of City of Jonesboro Parks & Recreation for fines levied by authorities having jurisdiction

due to non-compliance or inadequate compliance by Contractor.

- C. Arkansas Department of Environmental Quality (ADEQ) Requirements:
  - 1. Post on-site Storm Water Construction Notice
  - Develop Storm Water Pollution Prevention Plan (SWPPP).
  - Use best management practices to reduce run-off.
  - Inspect SW controls bi-monthly.

#### 1.03 SWPPP PLAN

Refer to the civil drawings for Erosion Control requirements.

#### 1.04 RELATED REQUIREMENTS

- A. Section 31 1000 Site Clearing: Limits on clearing; disposition of vegetative clearing debris.
- B. Section 31 2200 Grading: Temporary and permanent grade changes for erosion control.
- Section 32 9223 Sodding: Permanent turf for erosion control.

## 1.05 PERFORMANCE REQUIREMENTS

- A. Comply with all requirements of U.S. Environmental Protection Agency for erosion and sedimentation control, as specified for the National Pollutant Discharge Elimination System (NPDES), Phases I and II, under requirements for the 2003 Construction General Permit (CGP), whether the project is required by law to comply or not.
- Also comply with all more stringent requirements of State of Arkansas Erosion and Sedimentation Control Manual.
- Develop and follow an Erosion and Sedimentation Prevention Plan and submit periodic inspection reports.
- D. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.
  - Obtain and pay for permits and provide security required by authority having jurisdiction.
  - City of Jonesboro Parks & Recreation will withhold payment to Contractor equivalent to all fines resulting from non-compliance with applicable regulations.
- E. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.

- F. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
- G. Erosion on Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
  - Control movement of sediment and soil from temporary stockpiles of soil.
  - Prevent development of ruts due to equipment and vehicular traffic.
  - If erosion occurs due to work associated with this project, restore eroded areas at no cost to City of Jonesboro Parks & Recreation.
- H. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
  - Prevent windblown soil from leaving the project site.
  - Prevent tracking of mud onto public roads outside site.
  - 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
  - If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to City of Jonesboro Parks & Recreation.
- Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
  - If sedimentation occurs, install or correct preventive measures immediately at no cost to City of Jonesboro Parks & Recreation; remove deposited sediments; comply with requirements of authorities having jurisdiction.
  - If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- J. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
  - If sedimentation occurs, install or correct preventive measures immediately at no cost to City of Jonesboro Parks & Recreation; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- K. Open Water: Prevent standing water that could become stagnant.
- Maintenance: Maintain temporary preventive measures until permanent measures have been established.

#### **PART 2 PRODUCTS**

#### 2.01 MATERIALS

- A. Mulch: Use one or more of the following:
  - 1. Straw or hay.
  - 2. Erosion control matting or netting.
- B. Grass Seed for Temporary Cover: Select a species appropriate to climate, planting season, and intended purpose. If same area will later be planted with permanent vegetation, do not use species known to be excessively competitive or prone to volunteer in subsequent seasons.
- C. Bales: Air dry, rectangular straw bales.
  - Cross Section: 14 by 18 inches, minimum.
  - 2. Bindings: Wire or string, around long dimension.
- D. Bale Stakes: One of the following, minimum 3 feet long:
  - 1. Steel U- or T -section, with minimum mass of 1.33 lb per linear foot.
  - Wood, 2 by 2 inches in cross section.
- E. Silt Fence Fabric: Polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths:
  - Average Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D4751.
  - Permittivity: 0.05 secA-1, minimum, when tested in accordance with ASTM D4491.
  - Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D4355 after 500 hours exposure.
  - 4. Tensile Strength: 100 lb-f, minimum, in cross-machine direction; 124 lb-f, minimum, in machine direction; when tested in accordance with ASTM D4632.

- 5. Elongation: 15 to 30 percent, when tested in accordance with ASTM D4632.
- Tear Strength: 55 lb-f, minimum, when tested in accordance with ASTM D4533.
- 7. Color: Manufacturer's standard, with embedment and fastener lines preprinted.
- 8. Provide wire mesh silt fence backup as detailed on drawings.
- F. Silt Fence Posts: One of the following, minimum 5 feet long:
  - Steel U- or T -section, with minimum mass of 1.33 lb per linear foot.
  - Hardwood, 2 by 2 inches in cross section.

#### **PART 3 EXECUTION**

#### 3.01 EXAMINATION

A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

### 3.02 PREPARATION

Schedule work so that soil surfaces are left exposed for the minimum amount of time.

## 3.03 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.
- B. Construction Entrances: Traffic-bearing aggregate surface.
  - Width: As required; 20 feet, minimum.
  - Length: 50 feet, minimum.
  - Provide at each construction entrance from public right-of-way.
  - 4. Where necessary to prevent tracking of mud onto right-of-way, provide wheel washing area out of direct traffic lane, with drain into sediment trap or basin.
- C. Linear Sediment Barriers: Made of silt fences.
  - Provide linear sediment barriers:
    - Along downhill perimeter edge of disturbed areas, including soil stockpiles.
    - Perpendicular to flow across the bottom of existing and new drainage channels and swales that traverse disturbed areas or carry runoff from disturbed areas; space at maximum of 200 feet apart.
  - 2. Space sediment barriers with the following maximum slope length upslope from barrier:
    - Slope of Less Than 2 Percent: 100 feet.
    - b. Slope Between 2 and 5 Percent: 75 feet.
    - c. Slope Between 5 and 10 Percent: 50 feet.
    - d. Slope Between 10 and 20 Percent: 25 feet.
    - Slope Over 20 Percent: 15 feet.
- D. Storm Drain Drop Inlet Sediment Traps: As detailed on drawings.
- E. Temporary Splash Pads: Stone aggregate over filter fabric; size to suit application; provide at downspout outlets and storm water outlets.
- F. Soil Stockpiles: Protect using one of the following measures:
  - Cover with polyethylene film, secured by placing soil on outer edges.
  - Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.
- G. Mulching: Use only for areas that may be subjected to erosion for less than 6 months.
- H. Temporary Seeding: Use where temporary vegetated cover is required.

# 3.04 INSTALLATION

- A. Silt Fences:
  - Store and handle fabric in accordance with ASTM 04873.
  - Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.
  - Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28 inch high barriers, minimum 48 inch long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.

- 4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32 inch high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
- 5. Install with top of fabric at nominal height and embedment as specified.
- Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
- Fasten fabric to wood posts using one of the following:
  - Four nails per post with 3/4 inch diameter flat or button head, 1 inch long, and 14 gage, 0.083 inch shank diameter.
  - b. Five staples per post with at least 17 gage, 0.0453 inch wire, 3/4 inch crown width and 1/2 inch long legs.
- 8. Fasten fabric to steel posts using wire, nylon cord, or integral pockets.
- Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.

#### B. Straw Bale Rows:

- Install bales in continuous rows with ends butting tightly, with one bale at each end of row turned uphill.
- Install bales so that bindings are not in contact with the ground.
- Embed bales at least 4 inches in the ground.
- 4. Anchor bales with at least two stakes per bale, driven at least 18 inches into the ground; drive first stake in each bale toward the previously placed bale to force bales together.
- Fill gaps between ends of bales with loose straw wedged tightly.
- Place soil excavated for trench against bales on the upslope side of the row, compacted.

# C. Temporary Seeding:

- When hydraulic seeder is used, seedbed preparation is not required.
- When surface soil has been sealed by rainfall or consists of smooth undisturbed cut slopes, and conventional or manual seeding is to be used, prepare seedbed by scarifying sufficiently to allow seed to lodge and germinate.
- If temporary mulching was used on planting area but not removed, apply nitrogen fertilizer at 1 pound per 1000 sq. ft.
- 4. On soils of very low fertility, apply 10-10-10 fertilizer at rate of 12 to 16 pounds per 1000 sq. ft.
- Incorporate fertilizer into soil before seeding.
- 6. Apply seed uniformly; if using drill or cultipacker seeders place seed 1/2 to 1 inch deep
- 7. Irrigate as required to thoroughly wet soil to depth that will ensure germination, without causing runoff or erosion.
- Repeat irrigation as required until grass is established.

#### 3.05 MAINTENANCE

- A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.5 inches or more rainfall at the project site, and daily during prolonged rainfall.
- Repair deficiencies immediately.
- C. Silt Fences:
  - Promptly replace fabric that deteriorates unless need for fence has passed.
  - Remove silt deposits that exceed one-third of the height of the fence.
  - Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- D. Straw Bale Rows:
  - Promptly replace bales that fall apart or otherwise deteriorate unless need has passed.
  - Remove silt deposits that exceed one-half of the height of the bales.
  - Repair bale rows that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- Clean out temporary sediment control structures weekly and relocate soil on site.
- F. Place sediment in appropriate locations on site; do not remove from site.

# 3.06 CLEAN UP

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Fisher Arnold, Inc.
- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

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#### **SECTION 01 5813**

# **TEMPORARY PROJECT SIGNAGE**

#### **PART 1 GENERAL**

## 1.01 SECTION INCLUDES

Project identification sign.

# 1.02 QUALITY ASSURANCE

- Design sign and structure to withstand 70 miles/hour wind velocity.
- Finishes, Painting: Adequate to withstand weathering, fading, and chipping for duration of construction.

# **PART 2 PRODUCTS**

### 2.01 SIGN MATERIALS

- A. Structure and Framing: New, wood, structurally adequate.
- B. Sign Surface: Single sided, 96 inch x 96 inch., 10 mil (1/2") coroplast face with surface applied vinyl lettering and graphics.
- C. Rough Hardware: Galvanized.
- D. Lettering: Pre-cut vinyl self-adhesive products, design and colors as directed by architect.

### 2.02 PROJECT IDENTIFICATION SIGN

- A. One painted sign, 64 sq ft area, bottom 6 feet above ground.
- B. Graphic Design, Colors, Style of Lettering: Designated by Fisher Arnold Inc.

#### **PART 3 EXECUTION**

# 3.01 INSTALLATION

- A. Install project identification sign within 15 days after date fixed by Notice to Proceed.
- B. Erect at designated location.
- Erect supports and framing on secure foundation, rigidly braced and framed to resist wind Loadings.
- Install sign surface plumb and level, with butt joints. Anchor securely.

# 3.02 MAINTENANCE

A. Maintain signs and supports clean, repair deterioration and damage.

#### 3.03 REMOVAL

A. Remove signs, framing, supports, and foundations at completion of Project and restore the area.

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## **SECTION 01 6000**

#### PRODUCT REQUIREMENTS

#### **PART 1 GENERAL**

# 1.01 SECTION INCLUDES

- General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations and procedures.
- F. Procedures for City of Jonesboro Parks & Recreation-supplied products.
- G. Maintenance materials, including extra materials, spare parts, tools, and software.

#### 1.02 RELATED REQUIREMENTS

- Document 002113 Instructions to Bidders: Product options and substitution procedures prior to bid date.
- B. Section 01 4000 Quality Requirements: Product quality monitoring.

#### 1.03 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

### **PART 2 PRODUCTS**

#### 2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Unforeseen historic items encountered remain the property of the City of Jonesboro Parks & Recreation; notify City of Jonesboro Parks & Recreation promptly upon discovery; protect, remove, handle, and store as directed by City of Jonesboro Parks & Recreation.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the City of Jonesboro Parks & Recreation, or otherwise indicated as to remain the property of the City of Jonesboro Parks & Recreation, become the property of the Contractor; remove from site.

#### 2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Where all other criteria are met. Contractor shall give preference to products that:
  - Are extracted, harvested, and/or manufactured closer to the location of the project.
  - Have longer documented life span under normal use.
  - Result in less construction waste.
  - 4. Are made of vegetable materials that are rapidly renewable.
  - Are made of recycled materials.
  - If made of wood, are made of sustainably harvested wood, wood chips, or wood fiber.
  - If bio-based, other than wood, are or are made of Sustainable Agriculture Network certified products.
  - Are Cradle-to-Cradle Certified.

9. Have a published GreenScreen Chemical Hazard Analysis.

#### 2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

#### 2.04 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

#### PART 3 EXECUTION

#### 3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specifies time restrictions for submitting requests for substitutions during the bidding period and the documents required. Comply with requirements specified in Section 002113.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution constitutes a representation that the submitter:
  - Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - Agrees to provide the same warranty for the substitution as for the specified product.
  - Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to City of Jonesboro Parks & Recreation.
  - Waives claims for additional costs or time extension that may subsequently become apparent.
  - Agrees to reimburse City of Jonesboro Parks & Recreation and Fisher Arnold, Inc. for review or redesign services associated with re-approval by authorities.
- D. Substitution Submittal Procedure (after contract award):
  - Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
  - Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
  - Fisher Arnold, Inc. will notify Contractor in writing of decision to accept or reject request.

#### 3.02 OWNER-SUPPLIED PRODUCTS

- A. City of Jonesboro Parks & Recreation's Responsibilities:
  - Arrange for and deliver City of Jonesboro Parks & Recreation reviewed shop drawings, product data, and samples, to Contractor.
  - Arrange and pay for product delivery to site.
  - 3. On delivery, inspect products jointly with Contractor.
  - Submit claims for transportation damage and replace damaged, defective, or deficient items.
  - Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
  - Review City of Jonesboro Parks & Recreation reviewed shop drawings, product data, and samples.
  - 2. Receive and unload products at site; inspect for completeness or damage jointly with City of Jonesboro Parks & Recreation.
  - 3. Handle, store, install and finish products.
  - 4. Repair or replace items damaged after receipt.

# 3.03 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

#### 3.04 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- Prevent contact with material that may cause corrosion, discoloration, or staining.
- K. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- L. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

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#### **SECTION 01 7000**

# **EXECUTION AND CLOSEOUT REQUIREMENTS**

## **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Cutting and patching.
- D. Surveying for laying out the work.
- E. Cleaning and protection.
- F. Starting of systems and equipment.
- G. Demonstration and instruction of City of Jonesboro Parks & Recreation personnel.
- H. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- General requirements for maintenance service.

#### 1.02 RELATED REQUIREMENTS

- A. Section 01 1000 Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- Section 01 3000 Administrative Requirements: Submittals procedures, Electronic document submittal service.
- C. Section 01 4000 Quality Requirements: Testing and inspection procedures.
- D. Section 01 5000 Temporary Facilities and Controls: Temporary exterior enclosures.
- E. Section 01 5100 Temporary Utilities: Temporary heating, cooling, and ventilating facilities.
- F. Section 01 5713 Temp. Erosion / Sedimentation Control: Additional erosion and sedimentation control requirements.
- G. Section 01 7800 Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- H. Section 07 8400 Firestopping.

#### 1.03 SUBMITTALS

- See Section 01 3000 Administrative Requirements, for submittal procedures.
- Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
  - On request, submit documentation verifying accuracy of survey work.
  - Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in conformance with Contract Documents.
  - Submit surveys and survey logs for the project record.
- C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
  - Structural integrity of any element of Project.
  - Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - Visual qualities of sight exposed elements.
  - 5. Work of City of Jonesboro Parks & Recreation or separate Contractor.
  - Include in request:
    - Identification of Project.
    - Location and description of affected work.
    - Necessity for cutting or alteration.
      - Description of proposed work and products to be used.
    - e. Alternatives to cutting and patching.
    - Effect on work of City of Jonesboro Parks & Recreation or separate Contractor.
    - Written permission of affected separate Contractor.
    - Date and time work will be executed.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

#### 1.04 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- D. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- E. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
- F. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
  - Minimize amount of bare soil exposed at one time.
  - 2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
  - Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
  - Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- G. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
  - 1. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
- H. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- J. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

#### 1.05 COORDINATION

- See Section 01 1000 for occupancy-related requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.
- H. After City of Jonesboro Parks & Recreation occupancy of premises, coordinate access to site for
  - correction of defective work and work not in accordance with Contract Documents, to minimize disruption of City of Jonesboro Parks & Recreation' activities.

#### **PART 2 PRODUCTS**

# 2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 Product Requirements.

#### **PART 3 EXECUTION**

#### 3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

#### 3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

# 3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Fisher Arnold, Inc. four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Fisher Arnold, Inc., City of Jonesboro Parks & Recreation, participants, and those affected by decisions made.

#### 3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Fisher Arnold, Inc. of any discrepancies discovered.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to Fisher Arnold, Inc. the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Fisher Arnold, Inc.
- F. Utilize recognized engineering survey practices.

- G. Establish elevations, lines and levels. Locate and layout by instrumentation and similar appropriate means:
  - Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
  - Grid or axis for structures.
  - Building foundation, column locations, ground floor elevations.
- H. Periodically verify layouts by same means.
- Maintain a complete and accurate log of control and survey work as it progresses.

# 3.05 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

#### 3.06 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
  - Complete the work.
  - Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - Match work that has been cut to adjacent work.
  - Repair areas adjacent to cuts to required condition.
  - Repair new work damaged by subsequent work.
  - 7. Remove samples of installed work for testing when requested.
  - Remove and replace defective and non-conforming work.
- C. Execute cutting and patching including excavation and fill to complete the work, to uncover work in order to install improperly sequenced work, to remove and replace defective or non-conforming work, to remove samples of installed work for testing when requested, to provide openings in the work for penetration of mechanical and electrical work, to execute patching to complement adjacent work, and to fit products together to integrate with other work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
- J. Patching:
  - Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  - Match color, texture, and appearance.
  - Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- K. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- L. Make neat transitions. Patch work to match adjacent work in texture and appearance. Where

new work abuts or aligns with existing, perform a smooth and even transition.

M. Patch or replace surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. Repair substrate prior to patching finish. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

### 3.07 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

# 3.08 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

## 3.09 SYSTEM STARTUP

- Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- G. Submit a written report that equipment or system has been properly installed and is functioning correctly.

# 3.10 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of owner personnel.

#### 3.11 ADJUSTING

- Adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Testing, adjusting, and balancing HVAC systems: See mechanical plans

#### 3.12 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
  - Clean areas to be occupied by City of Jonesboro Parks & Recreation prior to final completion before City of Jonesboro Parks & Recreation occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Replace filters of operating equipment.
- G. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- H. Clean site; sweep paved areas, rake clean landscaped surfaces.
- Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

#### 3.13 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
  - Provide copies to Fisher Arnold, Inc. and City of Jonesboro Parks & Recreation.
- B. Notify Fisher Arnold, Inc. when work is considered ready for Fisher Arnold, Inc.'s Substantial Completion inspection.
- C. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Fisher Arnold, Inc.'s Substantial Completion inspection.
- D. Conduct Substantial Completion inspection and create Final Correction Punch List containing Fisher Arnold, Inc.'s and Contractor's comprehensive list of items identified to be completed or corrected and submit to Fisher Arnold, Inc.
- E. Correct items of work listed in Final Correction Punch List and comply with requirements for access to City of Jonesboro Parks & Recreation-occupied areas.
- F. Notify Fisher Arnold, Inc. when work is considered finally complete and ready for Fisher Arnold, Inc.'s Substantial Completion final inspection.
- G. Complete items of work determined by Fisher Arnold, Inc. listed in executed Certificate of Substantial Completion.

#### 3.14 MAINTENANCE

- Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- Furnish service and maintenance of components indicated in specification sections during the warranty period.
- Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- E. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- F. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the City of Jonesboro Parks & Recreation.

#### **SECTION 01 7800**

#### **CLOSEOUT SUBMITTALS**

#### **PART1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

#### 1.02 RELATED REQUIREMENTS

- A. Section 00 7200 General Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.
- B. Section 01 3000 Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Section 01 7000 Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

#### 1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Fisher Arnold, Inc. with claim for final Application for Payment.
- B. Operation and Maintenance Data:
  - Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Fisher Arnold, Inc. will review draft and return one copy with comments.
  - For equipment, or component parts of equipment put into service during construction and operated by City of Jonesboro Parks & Recreation, submit completed documents within ten days after acceptance.
  - Submit one copy of completed documents 15 days prior to final inspection. This copy
    will be reviewed and returned after final inspection, with Fisher Arnold, Inc.
    comments. Revise content of all document sets as required prior to final submission.
  - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.

#### C. Warranties and Bonds:

- For equipment or component parts of equipment put into service during construction with City of Jonesboro Parks & Recreation's permission, submit documents within 10 days after acceptance.
- Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
- For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

#### **PART 2 PRODUCTS - NOT USED**

#### PART 3 EXECUTION

#### 3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - Drawings.
  - Specifications.
  - Addenda.
  - 4. Change Orders and other modifications to the Contract.
  - Reviewed shop drawings, product data, and samples.

- Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by City of Jonesboro Parks & Recreation.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
  - Manufacturer's name and product model and number.
  - Product substitutions or alternates utilized.
  - Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
  - Measured depths of foundations in relation to finish first floor datum.
  - Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - Field changes of dimension and detail.
  - Details not on original Contract drawings.

#### 3.02 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

#### 3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
  - Product data, with catalog number, size, composition, and color and texture designations.
  - Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- Additional information as specified in individual product specification sections.
- E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.
- F. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

#### 3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
  - Description of unit or system, and component parts.
  - 2. Identify function, normal operating characteristics, and limiting conditions.
  - Include performance curves, with engineering data and tests.
  - 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

- Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- D. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Provide servicing and lubrication schedule, and list of lubricants required.
- G. Include manufacturer's printed operation and maintenance instructions.
- H. Include sequence of operation by controls manufacturer.
- Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- Additional Requirements: As specified in individual product specification sections.

#### 3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for City of Jonesboro Parks & Recreation's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- D. Prepare data in the form of an instructional manual.
- E. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- F. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- G. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Fisher Arnold, Inc., Consultants, Contractor and subcontractors, with names of responsible parties
- H. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- J. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- K. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- M. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
  - Part 1: Directory, listing names, addresses, and telephone numbers of Fisher Arnold, Inc., Construction Manager, Subcontractors, and major equipment suppliers.
  - Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
    - Significant design criteria.
    - b. List of equipment.
    - c. Parts list for each component.
    - d. Operating instructions.
    - Maintenance instructions for equipment and systems.
    - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.

- Part 3: Project documents and certificates, including the following:
  - Shop drawings and product data.
  - b. Air and water balance reports.
  - c. Certificates.
  - d. Photocopies of warranties and bonds.
- N. Provide a listing in Table of Contents for design data, with tabbed dividers and space for insertion of data.
- O. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Fisher Arnold, Inc., and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

#### 3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with City of Jonesboro Parks & Recreation's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- Include originals of each in operation and maintenance manuals, indexed separately on Table
  of Contents.

**END OF SECTION** 

#### **SECTION 02 3000**

#### SUBSURFACE INVESTIGATION

#### PART 1 GENERAL

The Geotechnical Engineering Services Report for this site, prepared by Anderson Engineering Consultants, Inc., and dated September 21, 2017, is included here for reference. The Contractor shall determine the appropriate option from the alternate methods of site preparation presented in the report.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

**END OF SECTION** 

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# GEOTECHNICAL INVESTIGATION FOR

PROPOSED JOE MACK CAMPBELL CONCESSION BUILDING
JONESBORO, ARKANSAS

FISHER ARNOLD

CONSULTING ENGINEERS

1801 LATOURETTE DRIVE

JONESBORO, ARKANSAS 72404

SEPTEMBER 21, 2017 JOB NO. 474317



# ANDERSON ENGINEERING CONSULTANTS, INC.



# ANDERSON ENGINEERING CONSULTANTS, INC.

3217 NEIL CIRCLE - JONESBORO, ARKANSAS 72401 PHONE (870) 932-3700 FAX (870) 932-3769

September 21, 2017

Job No. 474317

Mr. Jeremy Bevill, P.E. Fisher Arnold 1801 LaTourette Drive Jonesboro, Arkansas 72404

Re: Geotechnical Investigation

Proposed Joe Mack Campbell Concession Building

Jonesboro, Arkansas

ANDERSON ENGINEERING CNSULTANTS, INC

No. 73

Dear Mr. Bevill:

It is our pleasure to submit this report on the soil and foundation investigation for the proposed Joe Mack Campbell Concession Building at Jonesboro, Arkansas. The investigation consisted of field test borings, soils laboratory analyses, and foundation design analyses.

Soft soils will likely be encountered during construction. We recommend that the site preparation and foundation excavations be verified by our qualified geotechnical representative during the foundation construction, so that adequate remedial measures can be implemented. This is the most feasible means of assuring the owners, designers, and builders that the geotechnical design intent is being achieved. In the event adverse geotechnical conditions are encountered during excavation, they must be identified and evaluated so that safe and economical structures may be constructed.

We wish to express our appreciation for the opportunity of serving you and other members of the design team. We are available for further consultation during the design and construction at any time, should you have a need for further assistance.

Very truly yours,

ANDERSON ENGINEERING CONSULTANTS, INC.

Stuart M. Scheiderer, R.E.P., P.E. Senior Geotechnical Engineer

Scott W. Anderson, R.E.P., P.E.

Principal Engineer

SMS/SWA/plf 474317.GEO

# GEOTECHNICAL INVESTIGATION FOR PROPOSED JOE MACK CAMPBELL CONCESSION BUILDING

FISHER ARNOLD

CONSULTING ENGINEERS

1801 LATOURETTE DRIVE

JONESBORO, ARKANSAS 72404

JONESBORO, ARKANSAS

BY

ANDERSON ENGINEERING CONSULTANTS, INC.
GEOTECHNICAL CONSULTANTS
10205 ROCKWOOD ROAD
LITTLE ROCK, ARKANSAS 72204

**SEPTEMBER 21, 2017** 

JOB NO. 474317

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# Important Information About Your

# Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes

The following information is provided to help you manage your risks.

#### Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.

#### Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only,

#### A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- · not prepared for the specific site explored, or
- · completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

 the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- · composition of the design team, or
- project ownership.

As a general rule, always inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

#### Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. Do not rely on a geotechnical engineering report whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

#### Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## A Report's Recommendations Are Not Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. The geolechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

A Geotechnical Engineering Report is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

#### Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

**Read Responsibility Provisions Closely** 

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

#### **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a geoenvironmental study differ significantly from those used to perform a geotechnical study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. Do not rely on an environmental report prepared for someone else.

### Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in-this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.

#### Rely, on Your ASFE-Member Geotechnical Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.



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#### **PURPOSE**

The primary purposes of this geotechnical investigation were:

- a. To determine the physical and engineering properties of the soils within the area of the proposed construction with respect to their suitability for the support of the proposed building.
- b. To make recommendations for the earthwork and the type of foundation suited for the prevailing soil conditions within the proposed construction area.
- c. To evaluate and recommend the design procedures for the various soil and foundation items in accordance with current engineering practices.

#### SCOPE

The scope of this geotechnical investigation includes the following:

- a. The geologic features in the vicinity of the project consist of alluvial clayey and silty soils. One auger boring was performed and terminated at a depth of 21.5 feet as authorized by the client.
- b. Field testing consisted of Standard Penetration test samples (ASTM D 1586) taken the boring. Soils were visually classified in the field by a soils engineering technician.
- c. The soils analyses were based on N-values obtained from the Standard Penetration tests, moisture contents, Atterberg limits, mechanical grain size analyses, visual observations, and other routine inspection and classification methods. The soils were classified basically in accordance with the Unified Soil Classification System (ASTM D 2487); however, visual classifications may be given on the logs.
- d. Earthwork features of the site have been analyzed from results obtained from the laboratory testing program and data gathered from the field investigation. The earthwork features considered include surface drainage, utilities, fill materials, undercut, compaction, subgrade preparation, and weather conditions.
- e. The foundation bearing capacity and settlement analyses were based on our current foundation design procedures, using the Standard Penetration N-values obtained during drilling, results of the laboratory testing program, and engineering analyses.

#### **AUTHORITY**

This geotechnical investigation was authorized by issuance of Subcontract Agreement on August 31, 2017, by Mr. Tim Verden of Fisher Arnold, the owner's representative for the proposed project. The scope of services and fees were outlined in AECI Proposal No. 88253.

#### PROJECT DESCRIPTION

The project will consist of a small concession building at the existing baseball complex, the location of which is provided on a Vicinity Map, Plate 1. The building is 44.0± feet square and will be located between four ball fields, as shown on the Plan of Boring, Plate 2. Information provided indicates the finished floor of the building will be 2.0± feet above existing grade with exterior foundations bearing 2.0± below existing grades. Loads are anticipated to be light.

#### **GENERAL GEOLOGY**

The Jonesboro, Arkansas, area lies within the Mississippi Embayment Physiographic region of eastern Arkansas. This area consists of a complex layering of alluvial and terrace deposits of silts, clays, and sands with lenses of clay and gravel from the Quaternary Period. The soils range, in general, from clays to sands. The site soils were found to be consistent with the area geology and consisted primarily of silty clay (CL) over the areas and depths investigated. Previous experience in the area indicate the basal units to be dense sands and gravels.

#### **GEOTECHNICAL INVESTIGATION**

On September 18, 2017, a geotechnical drilling crew performed the drilling and sampling of one boring at the proposed project site. As a result of the drilling program, boring log showing stratigraphic and testing information is provided on Plate 3. The Field Classification System for Soil Exploration and Key to the Soil Classifications and Symbols are given on Plates 4 and 5, respectively. These systems are provided to aid the reader in interpreting the various symbols used on the logs of borings. The Unified Soil Classification System is given on Plate 6. This system is used to determine the soil classification and to develop the terminology used on the logs of borings.

The N-values shown on the logs and were determined from the number of blows (N) of the 140.0-pound hammer required to drive the 1-3/8-inch I.D. split spoon the last 12.0 inches of the total 18.0-inch drive or portions thereof as may be indicated on the boring logs. These values are used to correlate strength and settlement characteristics of the soils and to determine allowable bearing values of these materials.

#### GROUNDWATER CONDITIONS

Groundwater was encountered during this investigation at an approximate depth of 19.0 feet, but should not effect normal shallow excavations during construction. Perched water, however, should be expected during wet periods and beneath the existing hardscaping. This latent water condition is typically due to storage of recent rainfall or by a barrier to capillary evaporation. Perched

water if encountered will most likely be brief in duration and typically in low quantities. Areas likely to contain perched water include paved areas, beneath existing structures, old drainage swales, fills, and existing utility trenches.

Where perched water is encountered the contractor should expect to excavate gravity drainage ditches to divert it away from the construction area. Additionally, soft, wet and pumpable soils can be expected. In structural areas these soils should be removed and be replaced with a select fill soil compacted to project specifications. Since the quantity of undercut is unknown it would be prudent to establish a unit rate for this item of work to minimize construction delays.

#### SITE DRAINAGE

The designer should also consider the topography of the site and surrounding areas during planning, design, and construction. The final grading should ensure positive drainage away from the building. It is strongly recommended that roof drains, condensate lines, and other potential water sources divert water away from the building, preferably to the storm sewer system, to prevent accumulation around the perimeter of the proposed structures. The subgrade soils have the ability of absorbing significant amounts of moisture, which could be detrimental as strength loss and swelling of plastic clay will typically result with increases in moisture content.

A majority of the site is flat and offers minimal relief for surficial runoff. Efforts should be made to maintain existing drainage features through construction. Increased amounts of moisture could compromise the integrity of fill and result in additional undercut. The construction areas should be maintained in a well-drained condition in an effort to limit the amount of undercut required.

#### SEISMICITY

The seismic analysis requires the selection of appropriate site coefficients and other seismic values that can be established from the subsurface conditions, guidelines set forth by local, state, and federal codes, and historical seismic information. The structure should be designed using guidelines as set forth in the 2012/2015 International Building Code as required by **Arkansas Act 1100-1991** (and subsequent amendments) as determined appropriate. The site soils consist primarily of silty clay. The seismic values on the following page were obtained from the U.S. Geological Seismic Design Maps application and are considered applicable to this project site based upon the site conditions and the 2012/2015 International Building Code (IBC) seismic values for Arkansas:

#### IBC (2012/2015)

Site Class	D*
Value of Site Coefficient (F <sub>a</sub> )	1.000
Value of Site Coefficient (F <sub>v</sub> )	1.538
Spectral Response Acceleration at Short Periods (S <sub>s</sub> )	1.327
Spectral Response Acceleration at a Period of 1.0 Second (S <sub>1</sub> )	0.462

<sup>\*</sup>Considering the size and function of the proposed structure the 100-foot deep boring was not performed at the site as allowed by the IBC.

#### LABORATORY TESTING

Laboratory tests were performed on samples to aid in classification and engineering analyses. The moisture content was found to be 11.4% just below the existing concrete, but rapidly increased in the underlying soils. Atterberg limits were performed and resulted in liquid limits ranging from 27 to 38 with plasticity index values between 9 and 20 for a majority of the samples. Mechanical grain size analyses indicate most soils contain a minimum of 94.1% fines (passing the No. 200 sieve), resulting in a classification of silty clay (CL). The results obtained indicated most soils are slightly plastic and should not be prone to significant volumetric change. Provided the criteria in the **EARTHWORK** section is met or exceeded, the potential vertical rise (PVR) value should be maintained at less than 0.50 inch. Individual results are provided in Appendix B.

#### **EARTHWORK**

The following sections are intended to provide the designer and contractor with guidelines for construction of the project. They are not intended to be used as a specification for construction procedures or methods. It is strongly recommended that any desired modification be reviewed by the soils engineer prior to implementation into the project specifications. Site conditions different from those indicated herein may result in alteration of these recommendations, but should be verified by the soils engineer, or his representative.

#### Site Preparation:

The proposed construction area is currently occupied with concrete pavements, which should be removed. The N-values obtained from the borings indicate soft soils will be encountered and should be expected upon removal of the concrete. For an estimation of soft soils, the N-values provided on the boring log can be reviewed. Previous experience with similar soils indicates soils with an N-value exceeding 10 typically perform adequately for construction. Soils with lower values often require stabilization or undercut to be considered suitable. The N-values obtained in the boring were below 10 in the upper 7.5 feet. Due to the confined nature of the construction

area, proof rolling will not be practical. The exposed subgrade should be evaluated by a representative of this firm to determine the adequacy of the subgrade. Should soft soils be identified, stabilized or undercut will be required.

Stabilization efforts could be as simple as scarifying and drying of the materials and/or recompaction of the surface soils near its optimum moisture content. It is highly recommended the existing soils be re-compacted to a minimum of 95% Standard compaction prior to fill placement. In an effort to limit the required amount of undercut, a geotextile fabric could be placed over soft soils at a depth of 2.5 feet below planned bottom of footing. A thickened bridge lift, on the order of 12.0 to 18.0 inches could be placed above the fabric to allow placement of subsequent fill.

#### Fill Placement:

Ideal fill materials for the project should consist of granular, non-expansive type soils with a plasticity index (PI) between 5 and 20 per ACI 360R. Other locally available soils may also be suitable, but must be approved by the soils engineer prior to their use. The anticipated grades will likely require use of an off-site fill source. Obtaining compaction of on-site soils will be difficult given their soft condition and elevated moisture content. On-site soils are more prone to pumping and rutting than off-site granular soils, therefore, if on site soils are utilized it will be difficult and likely result in additional earthwork expense for aeration, drying, etc. Fill soils should be placed in maximum 8.0-inch loose lifts, moisture conditioned to within three percentage points of optimum moisture content, and compacted to a minimum of 98% Standard compaction. It should be noted that especially during wet or winter months, aeration of fill may be required.

The compaction and moisture content of fill materials should be verified through field density tests. One test per lift should be performed for every 2500 square feet of building area, but could be increased to 5000 to 10,000 square feet for parking. It would be prudent to require the performance of Atterberg limits and mechanical grain size analyses of fill materials during placement to ensure compliance with the criteria outlined herein as borrow pit soils may vary significantly across the pit.

#### **Excavation Criteria:**

The soils encountered should be excavated with normal tracked excavators. No conditions were encountered over the depths investigated that would indicate difficulty with excavations. Trench excavations for utilities should be completed with normal excavation equipment. The site soils are cohesive and should not be prone to significant sloughing or cave-ins. However, if these materials are allowed to saturate, some cave-ins are possible. Based on OSHA regulations

(29 CFR 1926, Subpart P) regarding soil classification for trench excavations, the shallow soils encountered would best classify as Type C. In any case, OSHA regulations regarding shoring or benching of excavations should be considered during construction. Backfilling trench excavations should satisfy the criteria given previously, though flowable fill may be used as an alternative for confined spaces provided it is allowed to properly cure.

#### **Adverse Weather Conditions:**

Site grading and earthwork operations will be more difficult in wet or winter months. Should earthwork operations for the project begin in the time period of November through April, the owner should anticipate and budget for additional expenses for earthwork. Construction of an all weather haul road may be necessary for access and mobility. Not only will more frequent and saturating rains be prevalent during these months, ambient air conditions are not conducive to drying of site soils. Efficient aeration and drying of soils is dependent upon high temperatures, low humidity, and the contractor's ability to disc or scarify the soils. Aeration and drying of on-site soils will require additional effort by the contractor and should be considered during budgeting or planning. Wet conditions may also require drying of otherwise suitable soils.

Should the owner or contractor elect to begin earthwork in wet or winter months, undercut of soft soils will likely be the most feasible option. Mechanical stabilization of the on-site soils is possible and could include the use of a geotextile fabric/grid to bridge over soft soils and provide support to subsequent fill. Implementation of a geotextile will require willingness and cooperation of the contractor for success. Chemical stabilization through lime or fly ash worked into wet soils can also be effective. However, these methods are also highly dependent upon the contractor's expertise, equipment, and proper installation or mixing methods. In any case, the proposed construction area should be maintained in a well drained condition during construction. Water should not be allowed to stand or pond on areas of exposed earthwork. In anticipation of rainfall, it would be prudent for the contractor to "seal" exposed subgrades with a smooth drum roller to promote runoff. Additionally, surface drainage control features such as stormwater ponds should be installed as soon as is practical.

#### **FOUNDATIONS**

Conventional shallow foundations are considered the most feasible foundation option based on the anticipated loadings, site conditions, and earthwork criteria established in the previous section. A post-tensioned slab foundation could also be used in an effort to reduce the amount of fill and/or undercut required. The following discussion will provide bearing capacity, settlement, and

other criteria typically required for in design. For the purposes of this report, bearing capacity refers to the net allowable bearing capacity, which is defined by the ultimate bearing capacity (factored dead and live loads) reduced by an acceptable factor of safety, which for this project is considered to be 2.0. Additionally, shape, inclination, groundwater depth, and other design factors are considered minimal and no reduction in bearing capacity are necessary for these conditions.

#### Bearing Capacity:

Based on the results of our field investigation, a bearing capacity of 1250 psf at a bearing depth of 2.0 feet is recommended for use in design. This value was developed using SPT values obtained from the drilling and laboratory testing program utilizing our in-house design program and earthwork criteria provided. Foundations may bear on adequate natural ground or properly compacted select fill. The N-values were utilized to develop the allowable bearing capacity calculations provided on Plate 8. As indicated on Plate 9, some undercut or deepening of foundations may be required to obtain the recommended bearing capacity. It should be noted these calculations are from current grades. Removal of soft soils during initial sitework and proper backfill will limit the amount of undercut during foundation installation. An explanation of the terminology used in the calculations and curve is presented on Plate 10. Interior depths may be decreased so long as they satisfy local building codes.

#### Settlement:

The settlement must be within tolerable limits, which should be established by the structural engineer, but have not been provided prior to this investigation. The potential settlement for conventional footings was estimated from results of Standard Penetration tests performed during drilling. The magnitude of total settlement at the recommended bearing capacity and depth was estimated to be on the order of 1.00 inch. A differential settlement on the order of 0.50 inch is recommended for use in the structural design. Should the bearing capacity or loads used in design differ from those indicated herein, the amount of settlement will vary accordingly.

#### Other Design Considerations:

The bearing capacity and settlement discussions provided previously assume that the structural loadings are positioned such that a relatively uniform bearing pressure is exerted to the bearing strata. Eccentric, inclined or other loadings that result in a non-uniform bearing pressure will require further evaluation by this firm once specific loading conditions are established. In any case, it would be prudent to increase the rigidity of the foundation in an effort to minimize

potential differential movements. An increase in rigidity can be achieved by techniques that would increase the section modulus of the foundation members. Column and wall footings should be designed in accordance with the requirements of the various applicable codes.

Resisting uplift loads should consider the weight of the footing and overlying soil backfill. A minimum factor of safety of 1.5 is recommended when calculating uplift resistance. For resistance of lateral forces, a net allowable passive resistance of 250 psf can be used for the portion of the footing extending below 1.5 feet. A coefficient of sliding resistance of 0.40 may be used by the designer to calculate frictional resistance along the bottom surface of the footing.

#### Excavation/Monitoring:

The excavations should be performed with equipment capable of providing a clean bearing surface. It would be ideal for the bottom 6.0 inches of the excavation be achieved with a smooth plate excavator, or hand labor. Reinforcing steel and concrete should be placed as soon as possible upon completion of the geotechnical representative evaluation, as described below. All debris, standing water and mud, including saturated soils, should be removed. In no instance should concrete be placed in frozen or saturated soils. If unforeseen circumstances require excavations to remain open for an extended period, a thin "mud slab" may be placed in an effort to reduce disturbance to the bearing strata. In this case, the excavation should extend a minimum of 2.0 inches below planned depth, allowing a thin layer of concrete the same strength as required for the footings to be placed.

The performance of the foundation system will partially depend on the quality of construction. It would be prudent to have further evaluations by the soils engineer, or his representative, to verify that the design bearing value has been achieved in excavations. Furthermore, the condition of the subgrade should be evaluated to insure cleanliness and uniformity of bearing strata immediately prior to concrete placement. Bearing capacity can be verified by the use of a static cone penetrometer, or other acceptable means designated by the soils engineer.

#### FLOOR SLABS

Differential movement of the floor slab may be caused by a difference in the allowable gross bearing capacity, differing heave conditions, and/or variable thicknesses of compressible soils below the floors. The stiffness effect of a well compacted subgrade and/or engineered fill in conjunction with a granular base, collectively known as the soil support system, should greatly diminish the differential floor slab movements to tolerable limits. Based on the proposed grades it appears that the soil support system will consist of compacted select fill overlain by a

free-draining granular fill. For this condition the designer should consider a modulus of subgrade reaction (k) of 100.0 pci over the top 8.0 inches of subgrade. The floor slabs and soil support system should be designed and constructed in accordance with American Concrete Institute (ACI) Publications 302.1R-15, Guide for Concrete Floor and Slab Construction, and 360R-10, Guide to Design of Slabs-on-Ground, and other applicable codes.

#### Subgrade Preparation:

Initially, the recommendations in the **EARTHWORK** section, including moisture/compaction testing, should be followed to prepare the subgrade. However, the designer should specify that after destructive/intrusive construction activities, such as weathering, construction traffic, and utility placement, the contractor be required to restore the top 8.0 inches of subgrade to its specified moisture, density, and grade control immediately prior to slab placement. This rehabilitation should be verified through quality control testing and a rod and level survey, as directed by ACI 302.1R-15, Subsection 6.1. This will aid in prevention of post construction slab movements induced by moisture variations inherent to any soil type, especially for exposed or polished floors with no covering.

#### Granular Base:

As per ACI 302.1R-15, Subsection 6.1.4, the granular base should consist of a clean, densely graded granular material with a balanced fine content that produces a low-friction surface while minimizing wicking. This material should have 100% passing the 1½ inch (38 mm) sieve, 15% to 50% passing the No. 4 (4.75 mm) sieve, and less than 12% passing the No. 200 (75 μm) sieve or satisfy the requirements of ASTM D1241 with the modification allowance of less than 12% passing the No. 200 (75 μm) sieve. Additionally, the material passing the No. 200 (75 μm) sieve should be clean granular fill with less than 3% clay or friable particles. It should be noted, the ACI code states that clean/cushion/concrete sand "meeting ASTM C33/C33M, will not be adequate". The base material should be placed and compacted with adequate quality control testing and grade control that conforms to ACI 117 with verification by rod and level survey.

#### Vapor Membrane:

The need for a vapor membrane depends on whether the floor slab will have a vapor sensitive covering, will have vapor sensitive items stored on the slab, or if the space above the slab will be a humidity controlled area. If the project does not have this vapor sensitivity or moisture control need, placement of a vapor membrane may not be necessary. However, if any of the above sensitivity issues apply, placement of a minimum 10-mil vapor membrane is recommended. Some floor covering systems (adhesives and flooring materials) may require a vapor membrane

to maintain a specified maximum slab moisture content as a condition of their warranty. The architect/engineer should decide on a case-by-case basis whether to place the vapor membrane above or below the granular layer. The guidelines in ACI 302.1R-15, Subsection 6.1.5, and ACI 302.2R-06, Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials, should be considered when determining the location of vapor membranes and the relation to floor finishes, project conditions, schedule, and the potential effects of slab curling and cracking.

#### **CONCLUSIONS AND RECOMMENDATIONS**

As a result of this geotechnical investigation, the following recommendations are offered for consideration:

- As previously discussed, conventional footings would serve satisfactorily for the proposed structures. Foundations should be designed in accordance with the necessary structural and/or architectural requirements.
- 2. Foundations should be designed utilizing a maximum allowable bearing of 1250 psf at a footing depth of 2.0 feet below the finished outside grade (or as directed by local building codes) on adequate natural ground or properly compacted, moisture conditioned fill.
- 3. Low PI, non-expansive fill soils shall be placed in 8.0-inch thick lifts and be compacted within three percentage points of optimum moisture content to 98% Standard Proctor density as per ASTM D 698. The select fill shall have a PI between 5 and 20 per ACI 360R. On-site soils with a PI of less than 20 may be used provided they are moisture conditioned to at least optimum.
- 4. Perimeter surface drainage should be assured around the exterior of the building to intercept and drain surface runoff or seepage water from the near surface and foundation support soils. It would also be a prudent measure to slope backfill soils away from foundation walls and otherwise protect the structure from moisture infiltration.
- Quality control testing should be utilized in the construction of the foundation, undercutting, fill placement, and floor slab construction with adequate testing to verify that the design requirements have been achieved.
- 6. Geotechnical engineering services by a qualified firm are recommended during the foundation construction phase so that adequate compensation can be made for conditions that may occur which differ significantly from those assumed as a result of this investigation.
- 7. Other recommendations are given throughout the text of this report.

#### **LIMITATIONS**

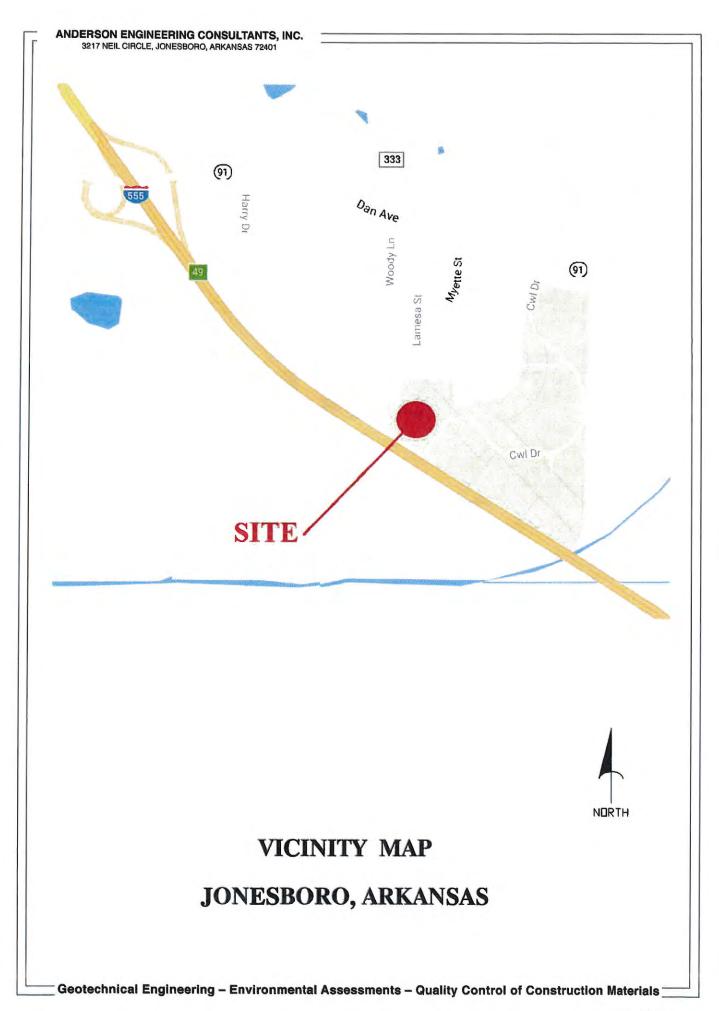
The boring logs shown in this report contain information related to the types of soil or rock encountered at specific locations and times and show lines delineating the interface between these materials, as well as results of tests performed in the laboratory on representative samples. The logs also contain our field geologist's interpretation of conditions that are believed to exist in those depth intervals between the actual samples taken. Therefore, these boring logs contain both factual and interpretative information. It is not warranted that these logs are representative of subsurface conditions at other locations and times.

The analyses, conclusions, and recommendations contained in this report are based on site conditions as they existed at the time of our field investigation and further on the assumption that the exploratory borings are representative of the subsurface conditions throughout the site. If, during construction, different subsurface conditions from those encountered in our borings are observed, or appear to be present beneath excavations, we must be advised promptly so that we can review these conditions and provide new recommendations as becomes necessary. Recognize that both natural and manmade events may have changed site conditions since issuance of this report and further review may result. If after submission of this report structural loads or finished grades are changed from those that were assumed, we urge that we be promptly informed, and retained to review our report to determine the applicability of the conclusions and recommendations, considering the changed conditions and/or time lapse. Further, we request that our firm be retained to review those portions of the plans and specifications for this particular project that pertain to earthwork and foundations as a means to determine whether the plans and specifications are consistent with the recommendations contained in the report.

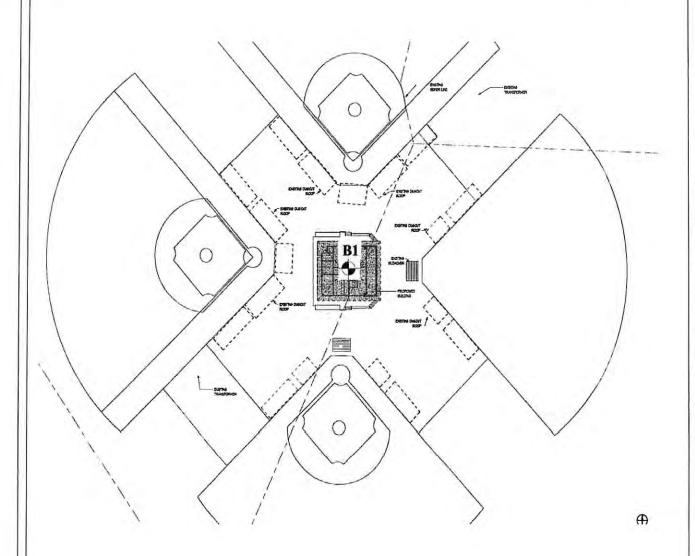
It should be understood that there is the possibility that even with the proper application of current engineering principles, conditions may exist on the site that could not be identified within the scope of this investigation or which were not reasonably identifiable from the available information. The conclusions and recommendations in this report contain all the limitations inherent to the principles and practice of geotechnical engineering. AECI has not performed any observations, investigation, study, or testing that is not specifically listed in the scope of services. Thus, AECI shall not be liable for failing to discover any condition whose discovery required the performance of services outside of the scope of services provided in our proposal.

\* \* \* \*

_	ANDERSON ENGINEERING CONSULTANTS INC	
	ANDERSON ENGINEERING CONSULTANTS, INC. 3217 NEIL CIRCLE, JONESBORO, ARKANSAS 72401	
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		APPENDIX A
		PLATES
		FLATES
П		
	Geotechnical Engineering – Environmen	tal Assessments – Quality Control of Construction Materials



### NOT DRAWN TO SCALE.





# PLAN OF BORING

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ANDERSON ENGINEERING CONSULTANTS, INC. 3217 NEIL CIRCLE, JONESBORO, ARKANSAS 72401 LOG OF BORING PROJECT: JOE MACK CAMPBELL CONCESSION BUILDING BORING NO: B1 JONESBORO, ARKANSAS FOR: **FISHER ARNOLD LOCATION: SEE PLAN OF BORING** DATE: 09/18/17 JOB NO: 474317 **BORING TYPE:** AUGER W/SPT DRILLER: **TARENA GEOTECHNICIAN: SIMMONS GROUND ELEVATION: NOT FURNISHED** SIMCO 2800-1 S S LEGEND Symbol Type Feet S Shelby Tube **NV Diamond Core** P Penetration Test N-Blows Per Standard Penetration Core .l - .lar Depth In Sample 1 Graphic ¥ Static Water Table ▼ Hydrostatic Water Table No Recovery VISUAL DESCRIPTION OF STRATUM 0 6.0 INCHES OF CONCRETE OVER 6.0 INCHES OF CLAY GRAVEL BASE P1 3 SOFT MOIST BROWN SILT (ML) PP = 0.50 KSFP2 6 SOFT TO VERY STIFF MOIST GRAY SANDY CLAY (CL) PP = 0.75 KSF5 **P3** 3 PP = 0.50 KSF CONTINUES (CL) P4 10 PP = 1.00 KSF 10 P<sub>5</sub> 10 PP = 1.00 KSF15 CONTINUES (CL) - BECOMES VERY MOIST **P6** 22 PP = 2.25 KSF 20 **P7** 5 PP = 0.50 KSFBOTTOM OF HOLE AT 21.5 FEET. BORING REMAINED OPEN. WATER ENCOUNTERED AT 19.0 FEET DURING DRILLING. 25 Geotechnical Engineering - Environmental Assessments - Quality Control Of Construction Materials

# FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

#### NON COHESTVE SOILS

(Silt, Sand, Gravel and Combinations)

Density	Particle Size Identification

Very Loose	- 0 - 4 blows/ft	Boulders		meter or more
Loose	- 4 to 10 blows/ft_	Cobbles	- 3 to 8-inc	h diameter
Medium Dense	- 10 to 30 blows/ft.	Gravel	- Coarse -	1 to 3-inch
Dense	- 30 to 50 blows/ft.		Medium	- 1/2 to 1-inch
Very Dense	- over 50		Fine	- 1/4 to 1/2-inch
	77.77.77	G 7	Comes	06

Sand - Coarse - 0.6 mm to W-inch
(dia. of pencil lead)

Medium - 0.2 mm to 0.6 mm

Relative Proportions (dia. of broom straw) Descriptive Term Percent - 0.05 mm to 0.2 mm Fine 1 - 10Trace (dia. of human hair) 11 - 20Little - 0.06 mm to 0.002 mm Silt 21 - 35 Some (Cannot see particles) 36 - 50 And

#### COHESIVE SOILS

(Clay, Silt and Combinations)

Consistency		Plasticity	
Very Soft	- <2 blows/f.t	Degree of	<u>Plasticity</u>
Soft	<ul> <li>2 to 4 blows/ft.</li> </ul>	Plasticity	Index
Medium Stiff	- 4 to 8 blows/ft	None to slight	0-4
Stiff	- 8 to 15 blows/ft.	Slight	5-7
Very Stiff	- 15 to 30 blows/ft.	Medium	8-22
Hard	- over 30	High to Very High	over 22

#### NOTES

#### Classification on logs are made by visual inspection.

Standard Penetration Test - Driving a 2.0-inch O.D., 1%-inch I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140-pound hammer free falling a distance of 30.0 inches. It is customary for AECI to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6.0 inches of penetration on the drill log (Example: 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e., 8 + 9 = 17 blows/ft.).

<u>Strata Changes</u> - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (---) represents an actually observed change, a dashed line (---) represents an estimated change.

Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

# KEY TO SOIL CLASSIFICATIONS AND SYMBOLS

_	97111 180		Symb	_	CATION SYSTEM(1)	TERMS CHARACTERIZING SOIL STRUCTURE(2		
Major Divisions		Letter	Hatching	Color	Name			
COARSE GRAINED - SOILS		GW	0.0.0	RED	Well-graded gravels or gravel-sand mixtures, little or no fines	SLICKENSIDED - having inclined planes of weakness that are slick and glossy in appearance.		
	GRAVEL AND	GP	0.0	2	Poorly-graded gravels or gravel-sand mixtures, little or no fines	FISSURED - containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less		
	GRAVELLY SOILS	GM	9 0 4	YELLOW	Silty gravels, gravel-sand-silt mixtures	vertical.  _ LAMINATED (VARVED) - composed of thin layers		
		GC	00	YELL	Clayey gravels, gravel-sand-clay mixtures	of varying color and texture, usually grading from sand or silt at the bottom to clay at the top.		
	A STATE STATE OF THE STATE OF T		sw	000		Well-graded sands or gravelly sands, little or no fines	CRUMBLY - cohesive soils which break into small blocks or crumbs on drying.	
	SAND AND SANDY SOILS	SP		RED	Poorly-graded sands or gravelly sands, little or no fines	CALCAREOUS - containing appreciable quantities of calcium carbonate, generally nodular.		
		SM		YELLOW	Silty sands, sand-silt mixtures	WELL GRADED - having wide range in grain sizes and substantial amounts of all intermediate particle sizes.		
		sc		YELI	Clayey sands, sand-clay mixtures	POORLY GRADED - predominantly of one grain size  (uniformly graded) or having a range of sizes with		
		ML		GREEN	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	some intermediate size missing (gap or skip graded).		
	SILTS AND CLAYS	CL			Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	SYMBOLS FOR TEST DATA		
FINE	LL<50	OL			Organic sitts and organic silt-clays of low plasticity	M/C = 15 - Natural moisture content in percent. γ = 95 - Dry unit weight in pounds/cubic foot. Qu = 1.23 - Unconfined compression strength		
SOILS		МН			Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	in tons/square foot.  Qc = 1.68 (21 psi) - Confined compression strength at indicated lateral pressure.  51-21-30 - Liquid limit, Plastic limit, and		
	SILTS AND CLAYS	СН		BLUE	Inorganic clays of high plasticity, fat clays	91-21-30 - Liquid limit, Plastic limit, and Plasticity index. 30% FINER - Percent finer than No. 200 mesh sieve.		
	LL>50	ОН			Organic clays of medium to high plasticity, organic silts	30 B/F - Blows per foot, Standard Penetration test.  ▼ - Hydrostatic water table.		
ORG	SHLY SANIC DILS	Pt	11111	ORANGE	Peat and other highly organic soils	→ - Static water table.		

#### TERMS DESCRIBING CONSISTENCY OF SOILS(2)

COARSE GRA	NINED SOILS	FINE GRAINED SOILS					
DESCRIPTIVE TERM	NO. BLOWS/FOOT STANDARD PEN. TEST	DESCRIPTIVE TERM	NO. BLOWS/FOOT STANDARD PEN. TEST	UNCONFINED COMPRESSION TONS PER SQ. FT.			
Very Laose Loose Firm (medium dense) Dense Very Dense	0 - 4 4 - 10 10 - 30 30 - 50 over 50	Very Soft Soft Plastic (medium stiff) Stiff Very Stiff Hard	<2 2 - 4 4 - 8 8 - 15 15 - 30 over 30	<0.25 0.25 - 0.50 0.50 - 1.00 1.00 - 2.00 2.00 - 4.00 over 4.00			

Field classification for "Consistency" is determined with a 0.25-inch diameter penetrometer.

- (1) From Waterways Experiment Station Technical Memorandum No. 3-357
- (2) From "Soil Mechanics in Engineering Practice" by Terzaghi and Peck

## UNIFIED SOIL CLASSIFICATION SYSTEM

(ASTM D 2487)

N	Major divisio	ens	Gro Sym		Typical Names		Laboratory Classifications	Criteria
	Si Ci	iravels no fines)	G	w	Well-graded gravels, gravel-sand mixtures, little or no fines		$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c =$	$\frac{(D_{30})^2}{D_{10} \times D_{60}}  between 1  and  3$
(ez	els coarse fractio 4 sleve size)	Clean gravels (Little or no fines)	G	Р	Poorly graded gravels, gravel- sand mixtures, little or no fines	curve, sleve size), symbols ***	Not meeting all gradation	on requirements for GW
Coarse-grained soils (More than half of material is larger than No. 200 sleve size)	Gravels (more than half of coarse fraction is larger than No. 4 sleve size)	rith fines le emount es)	GM*	d u	Silty gravels, gravel-sand-silt mixtures	Determine percentages of sand and gravel from grain-size curve.  Depending on percentage of fines (fraction smaller than No. 200 sleve size),  coerse-grained soits are classified as follows:  Less than 5 percent	Atterberg limits below "A" line or P.L less than 4	Above "A" line with P.I. Between 4 and 7 are borderline cases
	(more	Gravels with fines (Appreciable emount of fines)	G	С	Clayey gravels, gravel-sand-clay mixtures	a percentages of send and gravel from grain-size occarea-grained solis are classified as follows: Lass than 5 percent	Atterberg limits above "A" line with P.I. greater than 7	requiring use of dual symbols
Coarse-gr f material is I	on Is	sands no fines)	SI	N	Well-graded sands, gravelly sands, little or no fines	ages of sand le of fines (fre rained solls a 15 percent n 12 percent	$C_n = \frac{D_{00}}{D_{10}}$ greater than $\delta_i C_v =$	$\frac{(D_{g_0})^!}{D_{10} X D_{g_0}}$ between 1 and 3
(More than half of	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SP		Poorly graded sands, gravelly sands, little or no fines	nine percent on percentag coerse-g Less then More the	Not meeting all gradati	on requirements for SW
		fines mount of	SM*	d	Silty sands, sand-silt mixtures	Detern spending of	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in hatched zone with P.I. between 4
		Sands with fines (Appreciable amount of fines)	s		Clayey sands, sand-clay mixtures		Atterberg limits above "A" line with P.I. greater than 7	and 7 are borderline cases requiring use of dual symbols
	Sits and clays (Liquid limit less than 50)		(OS U		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	60		
(evels 00			С	L	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	50		СН
s than No. 2	ro.	(Liquid	0	L	Organic silts and organic silty clays of low plasticity	40 X8 Pu /		
Fine-grained solls (More than half of material is smaller than No. 200 sleve)		Sitts and clays (Liquid limit greater than 50)  P. T. H.		Н	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	Sesticity index	TÜZ	OH and MH
	its and days			н	Inorganic clays of high plasticity, fat clays	10	ct ct	
	S	(Liquid li	o	н	Organic clays of medium to high plasticity, organic silts	0 Ci	-ME ML and OL 20 30 40 50 60	70 80 90 100
	Highly	soils	F	Pt.	Peat and other highly organic soils		Liquid Limit Plasticity Cha	art

\*Division of GM and SM groups into subdivisions of d and u are for roads and airfield only. Subdivision is based on Atterberg limits; suffix d used when L.L. is 28 or less and the P.I. Is 6 or less; u used when L.L. is greater than 24.

\*\*Borderline classifications, used for soils possessing characteristics of two groups, are designated by combinations of group symbols.

For example GW-GC, well-graded gravel-sand mixture with clay binder.

# **Design Calculations for Conventional Footings**

PROJECT: Joe Mack Campbell Concession Building

PROJECT NO.: 474317 DATE: 09/21/17

BORING NO.: B1 TESTED BY: AECI SAFETY FACTOR: 2.00

Df	Depth	- ft.	STRATA	N	Qu	Qu/2	1.25Qu	.125Df	Qa
ff	from	to	H-ft	B/F	KSF	KSF	KSF	KSF	KSF
2.0	0.0	2.0	2.0	3	0.8	0.4	1.0	0.250	0.6
4.0	2.0	4.0	2.0	6	1.6	0.8	2.0	0.500	1.3
6.5	4.0	6.5	2.5	3	0.8	0.4	1.0	0.813	0.9
9.0	6.5	9.0	2.5	10	2.7	1.3	3.3	1.125	2.2
11.5	9.0	11.5	2.5	10	2.7	1.3	3.3	1.438	2.4
16.5	11.5	16.5	5.0	22	5.8	2.9	7.3	2.063	4.7
21.5	16.5	21.5	5.0	5	1.3	0.7	1.7	2.688	2.1

WATER TABLE LEVEL: 19.0 ft.

#### **CONVENTIONAL FOOTINGS**

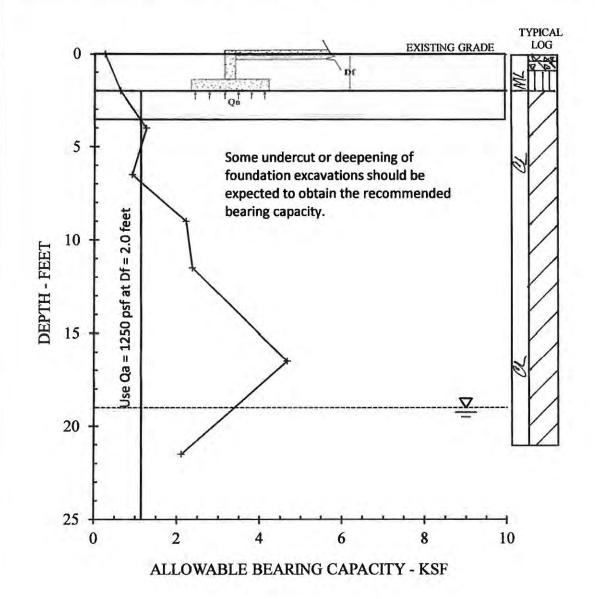
PROJECT: Joe Mack Campbell Concession Building

BORING NO.: B1

Jonesboro, Arkansas

PROJECT NO.: 474317 WATER TABLE: 19.0 ft.

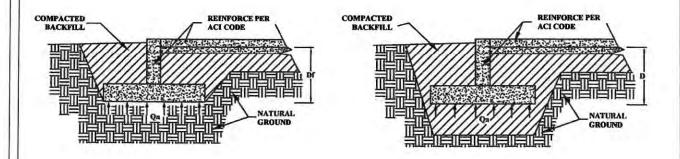
SAFETY FACTOR: 2.00



## **DEPTH - BEARING CAPACITY CURVE**

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# **CONVENTIONAL FOOTINGS**



# **Explanation of Calculations Shown in Tables**

D<sub>f</sub> = Depth from ground surface to bottom of footing (feet)

Depth = Depth from top to bottom of soil strata (feet)

Strata H = Thickness of soil strata (feet)

N = Standard penetration N-value (blows per foot)

Qu = Ultimate soil strength (ksf)

1.25 Qu = Soil Strength parameter (ksf)

 $0.125 D_f = Depth factor (ksf)$ 

 $Q_a$  = Allowable bearing capacity =  $(1.25 Q_u + 0.125 D_f) \div Safety Factor (ksf)$ 

# **EXPLANATION OF BEARING CAPACITY CALCULATIONS**

_ AN	DERSON ENGINEERING CONSULTANTS, INC	),	
	3217 NEIL CIRCLE, JONESBORO, ARKANSAS 72401		
		APPENDIX B	
	SIIDDOD		
	SUFFUR	TING LABORATORY DATA	
	catachnical Engineering - E-vice-ma	ental Assessments – Quality Control of Construction	Matarial

MOISTURE CONTENT DETERMINATION ASTM D 2216

Project: Joe Mack (Location: Jonesboro,	Campbell Cor AR	ncession			Proje Date	ect No.:	474317 09/19/17
		MOIST	URE CONT	ENT			
Sample Number	B1-P1	B1-P2	B1-P3	B1-P4	B1-P5	B1-P6	B1-P7
Tare Number	44	250	523	47	37	324	513
Tare + Wet Soil (g)	113.01	191.27	177.82	106.77	126.84	131.11	184.27
Tare + Dry Soil (g)	104.67	158.70	142.83	92.65	109.84	109.75	154.13
Tare (g)	31.36	22.68	39.66	31.39	30.81	23.47	39.21
Water (g)	8.34	32.57	34.99	14.12	17.00	21.36	30.14
Dry Soil (g)	73.31	136.02	103.17	61.26	79.03	86.28	114.92
Water Content (%)	11.38	23.95	33.91	23.05	21.51	24.76	26.23

# ATTERBERG LIMIT DETERMINATION ASTM D 4318

Project: Joe Mack Campbell Concession					Pr	oject No.: 474317
Location: Jonesboro	, Arkansas	1000			Da	ite: 09/19/1
		LIC	QUID LIMIT			
Sample Number	B1-P1	B1-P2	B1-P3	B1-P4	B1-P5	B1-P7
Tare Number	(1)	323	312	503	321	505
Number of Blows	Ĭ	27	24	25	26	24
Tare + Wet Soil (g)	AS	20.74	25.41	23.27	24.35	20.97
Tare + Dry Soil (g)	占	18.23	22.14	19.87	20.96	17.58
Tare (g)	7	10.15	10.06	8.72	10.24	8.75
Water (g)	NON - PLASTIC	2.51	3.27	3.40	3.39	3.39
Dry Soil (g)	4	8.08	12.08	11.15	10.72	8.83
Water Content (%)		31.06	27.07	30.49	31.62	38.39
Liquid Limit	NP	31	27	30	32	38
		PLA	ASTIC LIMI	T		
Sample Number	B1-P1	B1-P2	B1-P3	B1-P4	B1-P5	B1-P7
Tare Number		26	34	28	32	49
Tare + Wet Soil (g)	()	10.11	10.16	11.59	11.10	11.10
Tare + Dry Soil (g)	Ĕ	9.50	9.53	10.79	10.37	10.33
Tare (g)	AS	6.05	6.05	6.10	6.05	6.07
Water (g)	NON - PLASTIC	0.61	0.63	0.80	0.73	0.77
Dry Soil (g)	7	3.45	3.48	4.69	4.32	4.26
Water Content (%)	Q	17.68	18.10	17.06	16.90	18.08
Plastic Limit	4	18	18	17	17	18
Plasticity Index		13	9	13	15	20
Classification (#40)	NP	CL	CL	CL	CL	CL

# **MECHANICAL GRAIN SIZE ANALYSES ASTM D 1140**

Project:

Joe Mack Campbell Concession

Project No.:

474317

Location:

Jonesboro, AR

Date:

09/19/17

Sample No.:

B1-P2

Sample Depth:

2.5' to 4'

Soil Description:

**Grey Silty Clay** 

Sieve or Screen	Weight Retained (grams)	Cumulative Weight Retained (grams)	Percent Retained	Percent Passing	
#200	9.0	9.0	5.9	94.1	=
PAN	142.3	151.3	100.0	0.0	
D 10 1	0 110 1 20				_

Percent Sample Gravel/Sand: Percent Sample Silt/Clay:

5.9 94.1 Sample Weight: 151.3 Washing Loss:

142.3g

Project:

Joe Mack Campbell Concession

Project No.:

474317

Location:

Jonesboro, AR

Date:

09/19/17

Sample No.:

B1-P3

5' to 6.5'

**Soil Description:** 

Grey Silty Clay

Sample Depth:

or Screen	Weight Retained (grams)	Cumulative Weight Retained (grams)	Percent Retained	Percent Passing	
#200	0.5	0.5	0.5	99.5	
PAN	100.5	101.0	100.0	0.0	
D	1/0 1 05		~		_

Percent Sample Gravel/Sand: Percent Sample Silt/Clay:

0.5 99.5 Sample Weight: 101

Washing Loss: 100.5g

### MECHANICAL GRAIN SIZE ANALYSES **ASTM D 1140**

Project:

Joe Mack Campbell Concession

Project No.:

474317

Location: Sample No.: Jonesboro, AR

B1-P4

Date:

09/19/17 7.5' to 9'

Soil Description:

**Grey Silty Clay** 

Sample Depth:

Sieve or Screen	Weight Retained (grams)	Cumulative Weight Retained (grams)	Percent Retained	Percent Passing
#200	2.2	2.2	1.4	98.6
PAN	157.3	159.5	100.0	0.0
Percent Sample	Gravel/Sand: 1.4		Samp	le Weight: 159.5

1.4

Sample Weight: 159.5

Percent Sample Silt/Clay:

98.6

Washing Loss: 157.3g

Project: Location: Joe Mack Campbell Concession

Project No.:

474317

Jonesboro, AR

Date:

09/19/17

Sample No.:

B1-P5

Sample Depth:

10' to 11.5'

Soil Description:

Grey Silty Clay

Sieve or Screen	Weight Retained (grams)	Cumulative Weight Retained (grams)	Percent Retained	Percent Passing
#200	5.0	5.0	4.4	95.6
PAN	108.4	113.4	100.0	0.0

Percent Sample Gravel/Sand: 4.4 Percent Sample Silt/Clay: 95.6 Sample Weight: 113.4

Washing Loss:

108.4g

## MECHANICAL GRAIN SIZE ANALYSES **ASTM D 1140**

Project:

Joe Mack Campbell Concession

Project No.: 474317

Location:

Jonesboro, AR

Date: 09/19/17

Sample No.:

B1-P6

Sample Depth: 15' to 16.5'

Soil Description:

**Grey Silty Clay** 

Weight Retained (grams)	Cumulative Weight Retained (grams)	Percent Retained	Percent Passing
2.1	2.1	2.0	98.0
101.3	103.4	100.0	0.0
	Retained (grams)	Retained (grams)  Weight Retained (grams)  2.1  2.1	Retained (grams)  Weight Retained (grams)  Percent Retained  2.1  2.1  2.0

Percent Sample Gravel/Sand: Percent Sample Silt/Clay:

2.0 98.0 Sample Weight: 103.4

Washing Loss: 101.3g

Project: Location:

Joe Mack Campbell Concession

Project No.:

474317

Sample No.:

Jonesboro, AR

Date:

09/19/17

B1-P7

Sample Depth:

20' to 21.5'

Soil Description:

Grey Silty Clay

Sieve or Screen	Weight Retained (grams)	Cumulative Weight Retained (grams)	Percent Retained	Percent Passing
#200	0.9	0.9	0.6	99.4
PAN	157.5	158.4	100.0	0.0
Damaged Communication	0 1/0 1 0/			

Percent Sample Gravel/Sand:

0.6

Sample Weight: 158.4

Percent Sample Silt/Clay:

99.4

Washing Loss: 157.5g

	·	

	·	