



**PROJECT MANUAL
FOR
JONESBORO MUNICIPAL AIRPORT
MAINTENANCE HANGAR RECONSTRUCTION**

**VOLUME ONE OF TWO
ADMINISTRATION/GENERAL CONDITIONS SPECIFICATIONS
ISSUED FOR PERMIT**

February 26, 2021

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Little Rock, AR 72201

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Michael Baker
I N T E R N A T I O N A L

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CERTIFICATIONS PAGE

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.

Charles M. Popovich, Architect



MICHAEL BAKER INTERNATIONAL
1501 LBJ Freeway, Suite 650
Dallas, Texas 75234

DATE: February 26, 2021

SECTION 00 01 05

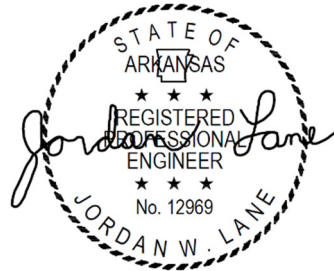
CERTIFICATIONS PAGE

I hereby certify that the structural portions of these plans and technical specifications have been prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the state of Arkansas. I certify that to the best of my knowledge the structural portions of the plans and specifications are designed as required by law and in compliance with all applicable codes for the state of Arkansas.

Jordan Lane, PE

NORTH DELTA ENGINEERING
311 West Huntington Area
Jonesboro, AR 72401

DATE: February 26, 2021



02/26/2021

SECTION 00 01 05

CERTIFICATIONS PAGE

I hereby certify that the Mechanical, Electrical, Plumbing and Fire Protection portions of these plans and technical specifications have been prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the state of Arkansas. I certify that to the best of my knowledge these portions of the plans and specifications are designed as required by law and in compliance with all applicable codes for the state of Arkansas.



02-05-21

Fallon Lee, PE
Mechanical Engineer

Insight Engineering
201 S Chester Street
Little Rock, Arkansas 72201

DATE: February 05, 2021

NOTICE TO BIDDERS

The **City of Jonesboro** will receive sealed bids for the construction of the **ARFF Replacement and Hangar Construction** project at the Jonesboro Municipal Airport. All bids will be received until 11:00 am local time on Thursday, March 25, 2021 in the Jonesboro Municipal Airport Building 1, 3901 Lindberg, Jonesboro, Arkansas 72401, at which time and place the bids shall be publicly opened and read aloud. Bids received after 11:00 am will not be accepted.

The work is generally described as follows:

Project includes construction of the Airfield Rescue and Fire Fighting (ARFF) building and a 12,500 sq ft maintenance Hangar.

Bid security in the form of a bid bond, certified check, or other negotiable instrument equivalent to five percent (5%) of the total bid is required and shall be made payable to the **City of Jonesboro**. Contract security in the form of 100% Performance and Payment Bonds will be required.

No bid may be withdrawn after closing time for the receipt of proposals for a period of sixty (60) days.

Bidding Documents may be examined at the following locations:

Office of the Engineer: Michael Baker International
 1400 West Markham, Suite 204
 Little Rock, AR 72201
 (501) 907-6223

Jonesboro Municipal Airport: Airport Manager's Office
 3901 Lindberg
 Jonesboro, AR 72401
 870-935-8669

Bid documents (plans, specifications, bid forms, and other contract documents) may be viewed and/or purchased at <https://www.sriplanroom.com/login>. An order for copies of the bid documents may be placed once login information is created. Additional technical assistance is provided by Jonesboro Blueprint (870-932-4349). When placing an order at the above website for copies of the Plans and "Contract Documents and Specifications", please indicate whether they will be secured by pick-up from Jonesboro Blueprint (222 Madison Street Jonesboro, AR 72401), or the method by which they should be shipped. NO REFUND of payment will be made and no partial sets will be issued. Price for documents is available at <https://www.sriplanroom.com/login>.

The Bidder (Proposer) must supply all the information required by the bid or proposal form.

The proposed contract is NOT subject to the Buy American provision under Section 9129 of the Aviation Safety and Capacity Expansion Act of 1990.

This project is excluded from coverage by either Federal Wage Rates or Arkansas Prevailing Wage Law. Per Arkansas Act 1068 of 2017, the Arkansas Prevailing Wage Law was repealed, and, Work performed after the effective date of the Act (April 6, 2017) is no longer covered by the prevailing wage law.

The **Jonesboro Municipal Airport Commission** reserves the right to waive any informalities or irregularities in the bids received and to reject any or all bids or to award or refrain from awarding the contract for the work, whichever is deemed to be in the Owner's best interests.

George Jackson, Manager
Jonesboro Municipal Airport

SECTION 10

DEFINITION OF TERMS

When the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be defined as follows:

Paragraph Number	Term	Definition
10-01	AASHTO	The American Association of State Highway and Transportation Officials.
10-02	Access Road	The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public roadway.
10-03	Advertisement	A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
10-04	Airport	Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; airport buildings and facilities located in any of these areas, and a heliport.
10-05	Airport Improvement Program (AIP)	A grant-in-aid program administered by the Federal Aviation Administration (FAA).
10-06	Air Operations Area (AOA)	The term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
10-07	Apron	Area where aircraft are parked, unloaded or loaded, fueled and/or serviced.
10-07.1	Architect	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for architectural design and observation of the contract work and acting directly or through an authorized representative. See A201 General Conditions of the Contract.

Paragraph Number	Term	Definition
10-08	ASTM International (ASTM)	Formerly known as the American Society for Testing and Materials (ASTM).
10-09	Award	The Owner's notice to the successful bidder of the acceptance of the submitted bid.
10-10	Bidder	Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
10-11	Building Area	An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.
10-12	Calendar Day	Every day shown on the calendar.
10-13	Certificate of Analysis (COA)	The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.
10-14	Certificate of Compliance (COC)	The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
10-15	Change Order	A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
10-16	Contract	A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment. The awarded contract includes but may not be limited to: Advertisement, Contract form, Proposal, Performance bond, payment bond, General provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
10-17	Contract Item (Pay Item)	A specific unit of work for which a price is provided in the contract.
10-18	Contract Time	The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of

Paragraph Number	Term	Definition
		calendar or working days, the contract shall be completed by that date.
10-19	Contractor	The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
10-20	Contractors Quality Control (QC) Facilities	The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
10-21	Contractor Quality Control Program (CQCP)	Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.
10-22	Control Strip	A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
10-23	Construction Safety and Phasing Plan (CSPP)	The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
10-24	Drainage System	The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
10-25	Engineer	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering design and observation of the contract work and acting directly or through an authorized representative.
10-26	Equipment	All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
10-27	Extra Work	An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Owner's Engineer or Resident Project Representative (RPR) to be necessary to complete the work within the intended scope of the contract

Paragraph Number	Term	Definition
		as previously modified.
10-28	FAA	The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.
10-29	Federal Specifications	The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.
10-30	Force Account	<p>a. Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis.</p> <p>b. Owner Force Account - Work performed for the project by the Owner's employees.</p>
10-31	Intention of Terms	<p>Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer and/or Resident Project Representative (RPR) is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer and/or RPR, subject in each case to the final determination of the Owner.</p> <p>Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.</p>
10-32	Lighting	A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
10-33	Major and Minor Contract Items	A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other

Paragraph Number	Term	Definition
		items shall be considered minor contract items.
10-34	Materials	Any substance specified for use in the construction of the contract work.
10-35	Modification of Standards (MOS)	Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.
10-36	Notice to Proceed (NTP)	A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
10-37	Owner	The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract. Where the term "Owner" is capitalized in this document, it shall mean airport Sponsor only. The Owner for this project is the Jonesboro Municipal Airport Commission.
10-38	Passenger Facility Charge (PFC)	Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.
10-39	Pavement Structure	The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.
10-40	Payment bond	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
10-41	Performance bond	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
10-42	Plans	The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications. Plans may also be referred to as 'contract drawings.'
10-43	Project	The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
10-44	Proposal	The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work

Paragraph Number	Term	Definition
		and furnish the necessary materials in accordance with the provisions of the plans and specifications.
10-45	Proposal guaranty	The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.
10-46	Quality Assurance (QA)	Owner's responsibility to assure that construction work completed complies with specifications for payment.
10-47	Quality Control (QC)	Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.
10-48	Quality Assurance (QA) Inspector	An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
10-49	Quality Assurance (QA) Laboratory	The official quality assurance testing laboratories of the Owner or such other laboratories as may be designated by the Engineer or RPR. May also be referred to as Engineer's, Owner's, or QA Laboratory.
10-50	Resident Project Representative (RPR)	Resident Project Representative (RPR) has not been assigned for this project. Notify Owner of unassigned and necessary responsibilities.
10-51	Runway	The area on the airport prepared for the landing and takeoff of aircraft.
10-52	Runway Safety Area (RSA)	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.
10-53	Safety Plan Compliance Document (SPCD)	Details how the Contractor will comply with the CSPP.
10-54	Specifications	A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
10-55	Sponsor	A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.

Paragraph Number	Term	Definition
10-56	Structures	Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
10-57	Subgrade	The soil that forms the pavement foundation.
10-58	Superintendent	The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction.
10-59	Supplemental Agreement	A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%; (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.
10-60	Surety	The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
10-61	Taxilane	A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.
10-62	Taxiway	The portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
10-63	Taxiway/Taxilane Safety Area (TSA)	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.
10-64	Work	The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.

Paragraph Number	Term	Definition
10-65	Working day	A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.
10-66	Owner Defined terms	See Supplemental Conditions

END OF SECTION 10

SECTION 20 PROPOSAL REQUIREMENTS AND CONDITIONS

20-01 Advertisement (Notice to Bidders). The Notice To Bidders is located in the Bidding Document section contained in these Specifications.

20-02 Qualification of bidders. Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening. Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.

Each bidder shall furnish the Owner satisfactory evidence of their financial responsibility. Evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether their financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

20-03 Contents of proposal forms. The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in paragraph 20-09 *Irregular proposals*.

A Prebid conference may be required on this project to discuss as a minimum, the following items: material requirements; submittals; Quality Control/Quality Assurance requirements; the construction safety and phasing plan including airport access and staging areas; and unique airfield paving construction requirements. If a Prebid conference is required, the requirements as well as the time, date, and place are indicated in the **Notice to Bidders**.

20-04 Issuance of proposal forms. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.

b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.

c. Documented record of Contractor default under previous contracts with the Owner.

d. Documented record of unsatisfactory work on previous contracts with the Owner.

20-05 Interpretation of estimated proposal quantities. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the Section 40, paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

20-06 Examination of plans, specifications, and site. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied to the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which the bidder may make or obtain from their own examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

20-07 Preparation of proposal. The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall correctly sign the proposal in ink. If the proposal is made by an individual, their name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state where the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of their authority to do so and that the signature is binding upon the firm or corporation.

20-08 Responsive and responsible bidder. A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

20-09 Irregular proposals. Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.
- e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.

f. If the applicable Disadvantaged Business Enterprise information is incomplete.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-10 Bid guarantee. Each separate proposal shall be accompanied by a bid bond, certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such bond, check, or collateral shall be made payable to the Owner.

20-11 Delivery of proposal. Each proposal submitted shall be placed in a sealed envelope plainly marked with the project number, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

20-12 Withdrawal or revision of proposals. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by email before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-13 Public opening of proposals. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-14 Disqualification of bidders. A bidder shall be considered disqualified for any of the following reasons:

a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

c. If the bidder is considered to be in "default" for any reason specified in paragraph 20-04, *Issuance of Proposal Forms*, of this section.

20-15 Discrepancies and Omissions. A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's Engineer of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's Engineer a written request for interpretation **no later than three (3) days** prior to bid opening.

Any interpretation of the project bid documents by the Owner's Engineer will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications or interpretations of the bidding documents in any manner other than written addendum.

END OF SECTION 20

**SECTION 00 41 00
BID FORM**

THE PROJECT AND THE PARTIES

1.01 TO:

- A. City of Jonesboro Municipal Airport Commission (Owner)
 - a. 3901 Lindbergh Drive
 - a. Jonesboro, Arkansas 72401

1.02 FOR:

- A. Project: Airfield Rescue and Firefighting (ARFF) Building, Jonesboro Municipal Airport, Arkansas
 - a. 3901 Lindbergh Drive
 - a. Jonesboro, Arkansas 72401

1.03 DATE: _____ (BIDDER TO ENTER DATE)

1.04 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)

- A. Bidder's Full Name _____
 - 1. Address _____
 - 2. City, State, Zip _____

1.05 OFFER

- A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Bid Documents prepared by Cooper Mixon Architects PLLC for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

B. BID OPTION PROJECT A – Airfield Rescue and Firefighting Building (ARFF):

_____ dollars
(\$ _____), in lawful money of the United States of America.

- C. We have included the required security deposit as required by Section 20 Proposal Requirements and Conditions.
- D. We have included the required performance assurance bonds in the Bid Amount as required by the Section 20 Proposal Requirements and Conditions.
- E. All applicable federal taxes are included and State of Arkansas taxes are included in the Bid Sum.

F. BID OPTION PROJECT B – Airport Maintenance Hangar Building:

_____ dollars
(\$ _____), in lawful money of the United States of America.

- G. We have included the required security deposit as required by Section 20 Proposal Requirements and Conditions.
- H. We have included the required performance assurance bonds in the Bid Amount as required by the Section 20 Proposal Requirements and Conditions.
- I. All applicable federal taxes are included and State of Arkansas taxes are included in the Bid Sum.

J. BID OPTION PROJECTS A AND B:

_____ dollars
(\$ _____), in lawful money of the United States of America.

- K. We have included the required security deposit as required by Section 20 Proposal Requirements and Conditions.

- L. We have included the required performance assurance bonds in the Bid Amount as required by the Section 20 Proposal Requirements and Conditions.
- M. All applicable federal taxes are included and State of Arkansas taxes are included in the Bid Sum.

1.06 ACCEPTANCE

- A. This offer shall be open to acceptance and is irrevocable for thirty days from the bid closing date.
- B. If this bid is accepted by Owner within the time period stated above, we will:
 - 1. Execute the Agreement within seven days of receipt of Notice of Award.
 - 2. Furnish the required bonds within seven days of receipt of Notice of Award.
 - 3. Commence work within seven days after written Notice to Proceed of this bid.
- C. If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.
- D. In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

1.07 CONTRACT TIME

- A. If this Bid is accepted, we will:
- B. Project A: Complete the Work in [_____] calendar weeks from Notice to Proceed.
- C. Project B: Complete the Work in [_____] calendar weeks from Notice to Proceed.

1.08 LIQUIDATED DAMAGES – PROJECT A

- A. \$1,000 per day and as defined elsewhere in the Project Manual.

1.09 LIQUIDATED DAMAGES – PROJECT B

- A. \$1,000 per day and as defined elsewhere in the Project Manual.

1.10 ADDENDA

- A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
 - 1. Project A - Addendum # _____ Dated _____
 - 2. Project A - Addendum # _____ Dated _____
 - 3. Project A - Addendum # _____ Dated _____

 - 4. Project B - Addendum # _____ Dated _____
 - 5. Project B - Addendum # _____ Dated _____
 - 6. Project B - Addendum # _____ Dated _____

1.11 ALTERNATES

- A. Project A
 - 1. ALTERNATE NO. 1 – Deduct to construct restrooms using standard light gage metal framing and standard hollow metal doors and frames in lieu of hardened CMU construction and heavy gage doors and frames. All other work remains unchanged.

(a) Deduct \$ _____

1.12 ALLOWANCES INCLUDED IN THE BASE PROPOSAL – PROJECT A

- A. Special Inspections Allowance: Include the stipulated sum listed below for engaging the independent special inspection agency and the required special inspections and testing as directed by the Architect.
 - a. \$5,000.00
- B. Radio Equipment Allowance: Include the stipulated sum listed below for the purchase of radio equipment.
 - a. \$2,500

1.13 ALLOWANCES INCLUDED IN THE BASE PROPOSAL – PROJECT B

- A. Special Inspections Allowance: Include the stipulated sum listed below for engaging the independent special inspection agency and the required special inspections and testing as directed by the Architect.
 - a. \$5,000.00

1.14 UNIT PRICES – PROJECT A

- A. Unit Prices **NOT** included in the Base Proposal. Unit prices shall include overhead, profit, and all other costs to complete the work.
 - 1. Unit Price for Alternate Flooring Adhesive in the event such remediation is required. Refer to Section 09 05 61 Common Work Results for Flooring Preparation:
 - a. Total square foot of area _____ area sq. ft.
 - b. Allowance for Adhesive per square foot \$_____per sq. ft.
 - Total amount** \$_____
 - (sq. ft. times price per sq. ft.)
 - 2. Unit Price for Remedial Floor Coating in the event such remediation is required. Refer to Section 09 05 61 Common Work Results for Flooring Preparation.:
 - a. Total square foot of area _____ area sq. ft.
 - b. Allowance for Remedial Coating per square foot \$_____per sq. ft.
 - Total amount** \$_____
 - (sq. ft. times price per sq. ft.)

1.15 UNIT PRICES – PROJECT B

- A. Unit Prices **NOT** included in the Base Proposal. Unit prices shall include overhead, profit, and all other costs to complete the work.
 - 1. Unit Price for Alternate Flooring Adhesive in the event such remediation is required. Refer to Section 09 05 61 Common Work Results for Flooring Preparation:
 - a. Total square foot of area _____ area sq. ft.
 - b. Allowance for Adhesive per square foot \$_____per sq. ft.

Total amount \$ _____
(sq. ft. times price per sq. ft.)

2. Unit Price for Remedial Floor Coating in the event such remediation is required. Refer to Section 09 05 61 Common Work Results for Flooring Preparation.:

- a. Total square foot of area _____ area sq. ft.
- b. Allowance for Remedial Coating per square foot \$ _____ per sq. ft.

Total amount \$ _____
(sq. ft. times price per sq. ft.) .

1.16 BID FORM SUPPLEMENTS – PROJECT A

- A. The following information is included with Bid submission:
 - 1. Subcontractors: Mechanical Work - HVAC (indicative of heating, air conditioning, and ventilating) , Electrical Work (indicative of wiring and illuminating fixtures), and any other associated subcontractors working on the project.
 - 2. I submit the names of the following subcontractors we propose to use, and their State contractor License Numbers. (Indicate "none" if subcontractor is not required for this project. Include Prime Bidder's name and license number if Prime Bidder is doing this work itself and the Prime Bidder's contractor license is qualified for this specialty.)
 - a. MECHANICAL WORK - HVAC
 - 1) Name: _____
 - 2) License # _____
 - b. PLUMBING WORK
 - 1) Name: _____
 - 2) License # _____
 - c. ELECTRICAL WORK
 - 1) Name: _____
 - 2) License # _____
 - d. ROOFING AND SHEET METAL WORK
 - 1) Name: _____
 - 2) License # _____

1.17 BID FORM SUPPLEMENTS PROJECT B

- A. The following information is included with Bid submission:
 - 1. Subcontractors: Mechanical Work - HVAC (indicative of heating, air conditioning, and ventilating) , Electrical Work (indicative of wiring and illuminating fixtures), and any other associated subcontractors working on the project.
 - 2. I submit the names of the following subcontractors we propose to use, and their State contractor License Numbers. (Indicate "none" if subcontractor is not required for this project. Include Prime Bidder's name and license number if Prime Bidder is doing this work itself and the Prime Bidder's contractor license is qualified for this specialty.)
 - a. MECHANICAL WORK - HVAC
 - 1) Name: _____
 - 2) License # _____
 - b. PLUMBING WORK

- 1) Name: _____
- 2) License # _____
- c. ELECTRICAL WORK
 - 1) Name: _____
 - 2) License # _____
- d. ROOFING AND SHEET METAL WORK
 - 1) Name: _____
 - 2) License # _____

1.18 FURTHER CONDITIONS

- A. The undersigned, by submitting this Bid, further agrees:
 - 1. To accept the provisions of the " SECTION 20 PROPOSAL REQUIREMENTS AND CONDITIONS."
 - 2. That Bidder understands that the Work must comply with accessibility laws and will ensure that the Work is built in strict accordance with the Contract Documents (Drawings, Plans, and Specifications), of which this Proposal is made a part.
 - 3. To accomplish the Work, including products, equipment, and systems; complete and functional; ready for operation.
 - 4. To allow any Federal, State or Local inspector, acting in their official capacity, access to the project site.
 - 5. That Bidder or subcontractor will not employ or contract with any illegal immigrants.
 - 6. That it is understood that the Owner may reject any or all bids and waive any informalities or irregularities.

1.19 ATTACHMENTS

- A. Bid Security – Project A.
- B. Bid Security – Project B.
- C. Power of Attorney for Bid Bond for the Bid Security – Project A.
- D. Power of Attorney for Bid Bond for the Bid Security – Project B.

1.20 BID FORM SIGNATURE(S)

- A. The Corporate Seal of
- B. _____
- C. (Bidder - print the full name of your firm)
- D. was hereunto affixed in the presence of:
- E. _____
- F. (Authorized signing officer, Title)
- G. (Seal)
- H. _____
- I. (Authorized signing officer, Title)

1.21 IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.

END OF SECTION

**SECTION 00 50 00
CONTRACTING FORMS AND SUPPLEMENTS**

PART 1 GENERAL

**1.01 CONTRACTOR IS RESPONSIBLE FOR OBTAINING A VALID LICENSE TO USE ALL
COPYRIGHTED DOCUMENTS SPECIFIED BUT NOT INCLUDED IN THE PROJECT
MANUAL.**

1.02 AGREEMENT AND CONDITIONS OF THE CONTRACT

- A. See Section 00 72 00 - General Conditions for the General Conditions.
- B. The Agreement is based on AIA A101.
- C. The General Conditions are based on Division 00 - General Provisions.

1.03 FORMS

- A. Use the following forms for the specified purposes unless otherwise indicated elsewhere in Contract Documents.
- B. Bond Forms:
 - 1. Bid Bond Form: AIA A310.
 - 2. Performance and Payment Bond Form: AIA A312.
- C. Post-Award Certificates and Other Forms:
 - 1. Submittal Transmittal Letter Form: AIA G810.
 - 2. Schedule of Values Form: AIA G703.
 - 3. Application for Payment Forms: AIA G702 with AIA G703 (for Contractors).
- D. Clarification and Modification Forms:
 - 1. Substitution Request Form: Section 01 25 10 Substitution Request Form, following Substitution Procedures.
- E. Closeout Forms:
 - 1. Forms: Refer to Division 00 General Provisions and Division 01 General Requirements Section 01700 for Contract Closeout Forms:
 - a. Contractor Warranty Form
 - b. Affidavit of Payment
 - c. Affidavit of Release of Liens
 - d. Final Waiver of Lien
 - e. Consent of Surety for Final Payment.

1.04 REFERENCE STANDARDS

- A. AIA A101 - Standard Form of Agreement Between Owner and Contractor where the basis of Payment is a Stipulated Sum 2017.
- B. AIA A310 - Bid Bond 2010.
- C. AIA A312 - Performance Bond and Payment Bond 2010.
- D. AIA G702 - Application and Certificate for Payment 1992.
- E. AIA G703 - Continuation Sheet 1992.
- F. AIA G810 - Transmittal Letter 2001.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 30

AWARD AND EXECUTION OF CONTRACT

30-01 Consideration of proposals. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern. Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

a. If the proposal is irregular as specified in Section 20, paragraph 20-09, *Irregular Proposals*.

b. If the bidder is disqualified for any of the reasons specified Section 20, paragraph 20-14, *Disqualification of Bidders*.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 Award of contract. The award of a contract, if it is to be awarded, shall be made within **30** calendar days of the date specified for publicly opening proposals, unless otherwise specified Herein.

If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

30-03 Cancellation of award. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with paragraph 30-07 *Approval of Contract*.

30-04 Return of proposal guaranty. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the paragraph 30-01, *Consideration of Proposals*. Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be

returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in paragraph 30-05, *Requirements of Contract Bonds*.

30-05 Requirements of contract bonds. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

30-06 Execution of contract. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in paragraph 30-05, *Requirements of Contract Bonds*, of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder.

30-07 Approval of contract. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 Failure to execute contract. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the period specified in paragraph 30-06, *Execution of Contract*, of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

END OF SECTION 30

DRAFT AIA® Document A101® - 2017

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

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

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

«Jonesboro Airport Commission»«, Other»
«3901 Lindburg Drive
Jonesboro, AR 72401»
«Telephone Number: (870) 935-1770»
«»

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

« »« »
« »
« »
« »

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

«Maintenance Hangar Reconstruction»
«Jonesboro, Arkansas»
«Project consists of the new construction of the Jonesboro Municipal Airport
Maintenance Hangar Reconstruction to replace the previous facility that was destroyed
in a tornado.»

The Architect:
(Name, legal status, address and other information)

«Michael Baker International»«, Limited Liability Company»
«1501 LBJ Freeway
Suite 650
Dallas, TX 75234»
«Telephone Number: (469) 801-8500»
«»

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

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

The parties should complete A101®-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®-2017, 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.



ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

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

EXHIBIT A 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:
(Check one of the following boxes.)

- The date of this Agreement.
- A date set forth in a notice to proceed issued by the Owner.
- Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)
-

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

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

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:
(Check one of the following boxes and complete the necessary information.)

[« »] Not later than « » (« ») calendar days from the date of commencement of the Work.

[« »] By the following date: « »

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

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

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
See project manual	

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
See project manual		

§ 4.3 Allowances, if any, included in the Contract Sum: (Identify each allowance.)

Item	Price
See project manual	

§ 4.4 Unit prices, if any:

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

Item	Units and Limitations	Price per Unit (\$0.00)
See project manual		

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

« [\\$1,000.00 per day](#) »

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

« »

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 Application for Payment is received by the Architect not later than the « » day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the « » day of the « » month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than « » (« ») days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within 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 of values 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 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 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; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

« 5% »

§ 5.1.7.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

<< >>

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

<< >>

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage upon Substantial Completion.)

<< >>

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 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 Article 12 of AIA Document A201–2017, 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:

<< >>

§ 5.3 Interest

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.)

<< >> % << >>

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the 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.)

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§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

Arbitration pursuant to Section 15.4 of AIA Document A201–2017

Litigation in a court of competent jurisdiction

Other *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, 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.

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 A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner’s convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner’s convenience.)

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

«George Jackson»
«3901 Lindburg Drive
Jonesboro, AR 72401»
«Telephone Number: (870) 935-8669»
«»
«»
«Email Address: gjackson@jonesboroairport.org»

§ 8.3 The Contractor’s representative:

(Name, address, email address, and other information)

« »
« »
« »
« »
« »
« »
« »

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

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™-2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201-2017, may be given in accordance with AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203-2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

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§ 8.7 Other provisions:

<< >>

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A101™-2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™-2017, General Conditions of the Contract for Construction
- .4 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

(Insert the date of the E203-2013 incorporated into this Agreement.)

<< >>

.5 Drawings

Number	Title	Date

.6 Specifications

Section	Title	Date	Pages

.7 Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[N/A] AIA Document E204™-2017, Sustainable Projects Exhibit, dated as indicated below:

(Insert the date of the E204-2017 incorporated into this Agreement.)

« »

[« N/A »] The Sustainability Plan:

Title	Date	Pages

[« »] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™-2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

« »

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

OWNER (Signature)

«George Jackson»«, Airport Manager»

(Printed name and title)

CONTRACTOR (Signature)

« »« »

(Printed name and title)

SECTION 40

SCOPE OF WORK

40-01 Intent of contract. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 Alteration of work and quantities. The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's Engineer or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

40-03 Omitted items. The Owner, the Owner's Engineer or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the

Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with Section 90, paragraph 90-04, *Payment for Omitted Items*.

40-04 Extra work. Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the RPR's opinion, is necessary for completion of the extra work.

When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, paragraph 90-05, *Payment for Extra Work*. Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a supplemental agreement as defined in Section 10, paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 Maintenance of traffic. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration.

- a. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to their own operations and the operations of all subcontractors as specified in Section 80, paragraph 80-04, *Limitation of Operations*. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in Section 70, paragraph 70-15, *Contractor's Responsibility for Utility Service and Facilities of Others*.

- b. With respect to their own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying

personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport.

c. When the contract requires the maintenance of an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep the road, street, or highway open to all traffic and shall provide maintenance as may be required to accommodate traffic. The Contractor, at their expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (<http://mutcd.fhwa.dot.gov/>), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street, or highway.

40-06 Removal of existing structures. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Resident Project Representative (RPR) shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract.

Except as provided in Section 40, paragraph 40-07, *Rights in and Use of Materials Found in the Work*, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be used in the work as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

40-07 Rights in and use of materials found in the work. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be embankment, the Contractor may at their own option either:

- a. Use such material in another contract item, providing such use is approved by the RPR and is in conformance with the contract specifications applicable to such use; or,
- b. Remove such material from the site, upon written approval of the RPR; or
- c. Use such material for the Contractor's own temporary construction on site; or,
- d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the RPR's approval in advance of such use. Should the RPR approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at their expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the RPR approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used. It is understood and agreed that the Contractor shall make no claim for delays by reason of their own exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-08 Final cleanup. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of the property Owner.

See Supplementary Conditions for additional requirements.

END OF SECTION 40

SECTION 50

CONTROL OF WORK

50-01 Authority of the Resident Project Representative (RPR). The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work.

The RPR does not have the authority to accept work that does not conform to specification requirements.

The RPR, for the purposes of this Project, is the architect as defined by AIA A201 General Conditions (see Definitions).

50-02 Conformity with plans and specifications. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans, or specifications.

If the RPR finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications, but that the portion of the work affected will, in their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place. The RPR will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.

If the RPR finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the RPR's written orders.

The term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the RPR's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the RPR's opinion,

such compliance is essential to provide an acceptable finished portion of the work.

The term “reasonably close conformity” is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity, but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor’s means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 Coordination of contract, plans, and specifications. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Supplementary Conditions or General Requirements conflict with General Provisions or Technical Specifications, the Supplementary Conditions or General Requirements shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

50-04 List of Special Provisions. Not Applicable.

50-05 Cooperation of Contractor. The Contractor shall be supplied with three (3) hard copies or an electronic PDF of the plans and specifications. The Contractor shall have available on the construction site at all times one hardcopy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by

the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the RPR and their inspectors and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the RPR or their authorized representative.

50-06 Cooperation between Contractors. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract. When separate contracts are let within the limits of any one project, each Contractor shall conduct the work not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with their own contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange their work and shall place and dispose of the materials being used to not interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join their work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-07 Construction layout and stakes. The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage against the Contractor.

Prior to the start of construction, the Contractor will check all control points for horizontal and vertical accuracy and certify in writing that the Contractor concurs with survey control established for the project.

The Contractor is responsible to establish all layout required for the construction of the project.

Laser, GPS, String line, or other automatic control shall be checked with temporary

control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

Construction Staking and Layout includes but is not limited to:

- a.** Clearing and Grubbing perimeter staking
- b.** Rough Grade slope stakes at 100-foot (30-m) stations
- c.** Drainage Swales slope stakes and flow line blue tops at 50-foot (15-m) stations

Subgrade blue tops at 25-foot (7.5-m) stations and 25-foot (7.5-m) offset distance (maximum) for the following section locations:

- a.** Runway – minimum five (5) per station
- b.** Taxiways – minimum three (3) per station
- c.** Holding apron areas – minimum three (3) per station
- d.** Roadways – minimum three (3) per station

Base Course blue tops at 25-foot (7.5-m) stations and 25-foot (7.5-m) offset distance (maximum) for the following section locations:

- a.** Runway – minimum five (5) per station
- b.** Taxiways – minimum three (3) per station
- c.** Holding apron areas – minimum three (3) per station

Pavement areas:

- a.** Edge of Pavement hubs and tacks (for stringline by Contractor) at 100-foot (30-m) stations.
- b.** Between Lifts at 25-foot (7.5-m) stations for the following section locations:
 - (1)** Runways – each paving lane width
 - (2)** Taxiways – each paving lane width
 - (3)** Holding areas – each paving lane width
- c.** After finish paving operations at 50-foot (15-m) stations:
 - (1)** All paved areas – Edge of each paving lane prior to next paving lot
- d.** Shoulder and safety area blue tops at 50-foot (15-m) stations and at all break points with maximum of 50-foot (15-m) offsets.
- e.** Fence lines at 100-foot (30-m) stations minimum.
- f.** Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, Visual Approach Slope

Indicators (VASIs), Precision Approach Path Indicators (PAPIs), Runway End Identifier Lighting (REIL), Wind Cones, Distance Markers (signs), pull boxes and manholes.

g. Drain lines, cut stakes and alignment on 25-foot (7.5-m) stations, inlet and manholes.

h. Painting and Striping layout (pinned with 1.5 inch PK nails) marked for paint Contractor. (All nails shall be removed after painting).

i. Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet (120 m) per pass (that is, paving lane).

The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor.

Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the Engineer without additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

50-08 Authority and duties of Quality Assurance (QA) inspectors. QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for a decision.

50-09 Inspection of the work. All materials and each part or detail of the work shall be subject to inspection. The RPR shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the RPR requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making

good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense. Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day.

Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 Removal of unacceptable and unauthorized work. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the RPR as provided in paragraph 50-02, *Conformity with Plans and Specifications*.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of Section 70, paragraph 70-14, *Contractor's Responsibility for Work*.

No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

50-11 Load restrictions. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of

material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period.

The Contractor, at their own expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel.

50-12 Maintenance during construction. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 Failure to maintain the work. Should the Contractor at any time fail to maintain the work as provided in paragraph 50-12, *Maintenance during Construction*, the RPR shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the RPR's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be recovered as a liquidated damage against the Contractor.

50-14 Partial acceptance. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such

partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 Final acceptance. Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection.

The RPR shall notify the Contractor in writing of final acceptance as of the date of the final inspection. If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the RPR will notify the Contractor and the Contractor shall correct the unsatisfactory work. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 Claims for adjustment and disputes. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the RPR has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the RPR who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

50-17 Value Engineering Cost Proposal – NOT USED

See Supplemental Conditions for additional Requirements.

END OF SECTION 50

**SECTION 00 72 00
GENERAL CONDITIONS**

FORM OF GENERAL CONDITIONS

**1.01 THE GENERAL CONDITIONS APPLICABLE TO THIS CONTRACT IS ATTACHED
FOLLOWING THIS PAGE.**

END OF SECTION

DRAFT AIA® Document A201® - 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

«Maintenance Hangar Reconstruction»
«Jonesboro, Arkansas»

THE OWNER:

(Name, legal status and address)

«Jonesboro Airport Commission»«Other»
«3901 Lindburg Drive
Jonesboro, AR 72401»

THE ARCHITECT:

(Name, legal status and address)

«Michael Baker International»«Limited Liability Company»
«1501 LBJ Freeway
Suite 650
Dallas, TX 75234»

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ADDITIONS AND DELETIONS:

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14 TERMINATION OR SUSPENSION OF THE CONTRACT

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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 or proposal 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. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 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.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 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 retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and 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 the 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 suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, 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 suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or

relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

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 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, 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 in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 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.

§ 2.3.2 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.

§ 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 2.3.4 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.

§ 2.3.5 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.

§ 2.3.6 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.

§ 2.4 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.

§ 2.5 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 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 default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for 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. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

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 its 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 2.3.4, 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 submit 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, subject to Section 15.1.7, 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. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be 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 notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative 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 approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 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

§ 3.5.1 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.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 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 14 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 that an equitable adjustment be made 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, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim 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 notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice 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 and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably 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, or fails to provide submittals in accordance with the approved 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 make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and

similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 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 how 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 the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect 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 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.

§ 3.12.10.1 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 be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately 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 and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and 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.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 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, 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, or patching shall be restored to the condition existing prior to the cutting, fitting, or 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 construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its 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 and 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 the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with 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 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 an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the 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 Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 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.

§ 4.2 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.

§ 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 promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) 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

The Owner and Contractor shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 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 13.4.2 and 13.4.3, whether or not the 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, 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 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 order 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 Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 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 the 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 Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice 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 for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, 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 that the Contractor, by these Contract 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 Sub-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; 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 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 term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 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 any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its 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 or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has 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 notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work 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. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 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 that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor 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. The Contractor shall proceed promptly with changes in the Work, 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 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine 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 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;

- .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, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 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.

§ 7.3.7 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.

§ 7.3.8 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 may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

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, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 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 (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended 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

§ 9.1.1 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.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent 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. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and 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 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, suppliers, or other persons or entities that 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 (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole 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 in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. 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. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site 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 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 suppliers 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;
 - .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- or

.7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

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

§ 9.5.4 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 supplier 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 Contractor shall reflect such payment on its next Application 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 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 and suppliers 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 or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to 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 or provided by 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, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 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' 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; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and 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 the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the 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 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 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. 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 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, (3) a written statement that the Contractor knows of no 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, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and 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, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance 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 the lien, claim, security interest, or encumbrance, 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, corrected, 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 the 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;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a 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, a Subcontractor, or a Sub-subcontractor; 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 implement, 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 the owners and users of adjacent sites and utilities of the safeguards.

§ 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. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is 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, notice of the 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 and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. 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 notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's 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 the material or substance or who are to perform the task of removal or safe containment of the 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 by the amount of the Contractor's reasonable additional costs of shutdown, 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 hazardous 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 hazardous 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 reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances 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 reimburse 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 Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 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.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the

procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, 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 those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 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, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement 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 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

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, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before 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 any 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 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 2.5.

§ 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 of the Owner or Separate Contractors, whether completed or partially completed, 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, excluding that jurisdiction's choice of law rules. 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 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 the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 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.

§ 13.3.2 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 thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 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 tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 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 13.4.1, 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 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 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.

§ 13.4.4 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.

§ 13.4.5 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.

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

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties 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.

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, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, 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 reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, 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' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work 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' 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 or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .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 reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner 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' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 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 under 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 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 Owner shall pay the Contractor for Work

properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

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, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the 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 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by 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 under this Section 15.1.3.1 shall 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.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 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.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 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.

§ 15.1.6.2 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.

§ 15.1.7 Waiver of 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 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, 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. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a 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 the 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 receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, 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 15.1.7, 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 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 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. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. 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 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party 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 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party 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 those of the Owner and Contractor under this Agreement.



SECTION 80

EXECUTION AND PROGRESS

80-01 Subletting of contract. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

80-02 Notice to proceed (NTP). The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within **ten (10)** days of the NTP date. The Contractor shall notify the RPR at least **24 hours** in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

80-03 Execution and progress. Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least **ten (10) days** prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least **24 hours** in advance of resuming operations. The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

For Projects over \$500,000, the project schedule shall be prepared as a network diagram in Critical Path Method (CPM), or other format, or as otherwise specified. It

shall include information on the sequence of work activities, milestone dates, and activity duration. The schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a **twice** monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

80-04 Limitation of operations. The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the RPR) at least **48 hours** prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the RPR and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph 70-08, *Construction Safety and Phasing Plan (CSPP)*.

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA.

Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) and/or as listed below, cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as follows: **(See CSPP)**

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction and the approved CSPP.

80-04.1 Operational safety on airport during construction. All Contractors' operations shall be conducted in accordance with the approved project Construction Safety and Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD) and the provisions set forth within the current version of AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during

construction activities. The Contractor shall prepare and submit a SPCD that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and SPCD and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP and SPCD unless approved in writing by the Owner. The necessary coordination actions to review Contractor proposed modifications to an approved CSPP or approved SPCD can require a significant amount of time.

80-05 Character of workers, methods, and equipment. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily. Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall not cause injury to previously completed work, adjacent property, or existing airport facilities due to its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or

equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR to do so.

The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements.

If, after trial use of the substituted methods or equipment, the RPR determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the RPR may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

80-06 Temporary suspension of the work. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work.

Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 Determination and extension of contract time. The number of calendar or working days shall be stated in the proposal and contract and shall be known as the Contract Time. If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

80-07.1 Contract time based on working days. Contract time based on working days shall be calculated weekly by the Resident Project Representative (RPR). The RPR will furnish the Contractor a copy of their weekly statement of the number of working days charged against the contract time during the week and the number of working days currently specified for completion of the contract (the original contract time plus the number of working days, if any, that have been included in approved Change Orders or Supplemental Agreements covering Extra Work).

The weekly statement of contract time charged is based on the following considerations:

(1) Time will be charged for days on which the Contractor could proceed with scheduled work under construction at the time for at least six (6) hours with the normal work force employed on such items. When normal work force is a double-shift, use 12 hours; and when the normal work force is on a triple-shift, use 18 hours. Conditions beyond the Contractor's control such as strikes, lockouts, unusual delays in transportation, temporary suspension of the scheduled work items under construction or temporary suspension of the entire work which have been ordered by the Owner for reasons not the fault of the Contractor, shall not be charged against the contract time.

(2) The RPR will not make charges against the contract time prior to the effective date of the notice to proceed.

(3) The RPR will begin charges against the contract time on the first working day after the effective date of the notice to proceed.

(4) The RPR will not make charges against the contract time after the date of final acceptance as defined in Section 50, paragraph 50-14, *Final Acceptance*.

(5) The Contractor will be allowed one (1) week in which to file a written protest setting forth their own objections to the RPR's weekly statement. If no objection is filed within such specified time, the weekly statement shall be considered as acceptable to the Contractor.

The contract time (stated in the proposal) is based on the originally estimated quantities as described in the Section 20, paragraph 20-05, *Interpretation of Estimated Proposal Quantities*. Should the satisfactory completion of the contract require performance of work in greater quantities than those estimated in the proposal, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in contract time shall not consider either the cost of work or the extension of contract time that has been covered by change order or supplemental agreement and shall be made at the time of final payment. **(See Section 01135 Weather Delays for normal monthly weather information)**

80-07.2 Contract time based on calendar days. Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance. **(See Section 01135 Weather Delays for normal monthly weather information)**

80-07.3 Contract time based on specific completion date. When the contract time is a specified completion date, it shall be the date on which all contract work shall be substantially complete.

If the Contractor finds it impossible for reasons beyond their own control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this paragraph, the Contractor may, at any time prior to the expiration of the contract time as extended, make a written request to the Owner for an extension of time setting forth the reasons which the Contractor believes will justify the granting of their own request. Requests for extension of time, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded what could normally be expected during the contract period. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the supporting documentation justify the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Owner may extend the time for completion by a change order that adjusts the contract time or

completion date. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

80-08 Failure to complete on time. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety.

Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract. Schedules and amounts for liquidated damages are described in Specification 01010 – Summary of Work.

The maximum construction time allowed for all Schedules will be the sum of the time allowed for individual schedules but not more than **60** days. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

80-09 Default and termination of contract. The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or
- b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or
- c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the execution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or

g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or

h. Makes an assignment for the benefit of creditors, or

i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 Termination for national emergencies. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR.

Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 Work area, storage area and sequence of operations. The Contractor shall obtain approval from the RPR prior to beginning any work in all areas of the airport. No operating runway, taxiway, or air operations area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate work in accordance with the approved CSPP and SPCD.

END OF SECTION 80

SECTION 90

MEASUREMENT AND PAYMENT

90-01 Measurement of quantities. All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meters) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the RPR.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When requested by the Contractor and approved by the RPR in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the RPR and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Measurement and Payment Terms

Term	Description
Excavation and Embankment	In computing volumes of excavation, the average end area method will be used unless otherwise specified.

Term	Description
Volume	
Measurement and Proportion by Weight	<p>The term “ton” will mean the short ton consisting of 2,000 pounds (907 kg) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, independently certified scales by competent, qualified personnel at locations designated by the RPR. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the RPR directs, and each truck shall bear a plainly legible identification mark.</p>
Measurement by Volume	<p>Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.</p>
Asphalt Material	<p>Asphalt materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at 60°F (16°C) or will be corrected to the volume at 60°F (16°C) using ASTM D1250 for asphalts. Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when asphalt material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.</p>
Cement	<p>Cement will be measured by the ton (kg) or hundredweight (km).</p>

Term	Description
Structure	Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
Timber	Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.
Plates and Sheets	The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.
Miscellaneous Items	When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
Scales	<p>Scales must be tested for accuracy and serviced before use. Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.</p> <p>Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the RPR before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed 0.1% of the nominal rated capacity of the scale, but not less than one pound (454 grams). The use of spring balances will not be permitted.</p>

Term	Description
	<p>In the event inspection reveals the scales have been “overweighing” (indicating more than correct weight) they will be immediately adjusted. All materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of 0.5%.</p> <p>In the event inspection reveals the scales have been underweighing (indicating less than correct weight), they shall be immediately adjusted. No additional payment to the Contractor will be allowed for materials previously weighed and recorded.</p> <p>Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the RPR can safely and conveniently view them.</p> <p>Scale installations shall have available ten standard 50-pound (2.3 km) weights for testing the weighing equipment or suitable weights and devices for other approved equipment.</p> <p>All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.</p>
<p>Rental Equipment</p>	<p>Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in paragraph 90-05 <i>Payment for Extra Work</i>.</p>
<p>Pay Quantities</p>	<p>When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the RPR. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the</p>

Term	Description
	amount represented by the authorized changes in the dimensions.

90-02 Scope of payment. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of Section 70, paragraph 70-18, *No Waiver of Legal Rights*.

When the “basis of payment” subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 Compensation for altered quantities. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, paragraph 40-02, *Alteration of Work and Quantities*, will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 Payment for omitted items. As specified in Section 40, paragraph 40-03, *Omitted Items*, the RPR shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the RPR omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the RPR’s order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the RPR’s order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner. In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred

for the purpose of performing the omitted contract item prior to the date of the RPR's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

90-05 Reserved.

90-06 Partial payments. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

a. From the total of the amount determined to be payable on a partial payment, **5 percent** (5%) of such total amount will be deducted and retained by the Owner for protection of the Owner's interests. Unless otherwise instructed by the Owner, the amount retained by the Owner will be in effect until the final payment is made except as follows:

(1) Contractor may request release of retainage on work that has been partially accepted by the Owner in accordance with Section 50-03. Contractor must provide a certified invoice to the RPR that supports the value of retainage held by the Owner for partially accepted work.

(2) In lieu of retainage, the Contractor may exercise at its option the establishment of an escrow account per paragraph 90-08.

b. The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

c. When at least 95% of the work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and

with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done. The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 Payment for materials on hand. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

- a. The material has been stored or stockpiled in a manner acceptable to the RPR at or on an approved site.
- b. The Contractor has furnished the RPR with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the RPR with satisfactory evidence that the material and transportation costs have been paid.
- d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material stored or stockpiled.

e. The Contractor has furnished the Owner evidence that the material stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of their responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials. The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this paragraph.

90-08 Payment of withheld funds. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in paragraph 90-06 *Partial Payments*, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 Acceptance and final payment. When the contract work has been accepted in accordance with the requirements of Section 50, paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed.

The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement.

The Contractor and the RPR shall resolve all disputes (if any) in the measurement and

computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the RPR's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the RPR's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with Section 50, paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in paragraph 90-11, *Contractor Final Project Documentation*, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of Section 50, paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

90-10 Construction warranty.

a. In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work. Light Emitting Diode emitting diode (LED) light fixtures with the exception of obstruction lighting, must be warranted by the manufacturer for a minimum of four (4) years after date of installation inclusive of all electronics.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

d. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

e. The Owner will notify the Contractor, in writing, within **seven (7)** days after the discovery of any failure, defect, or damage.

f. If the Contractor fails to remedy any failure, defect, or damage within **fourteen (14)** days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

h. This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

90-11 Contractor Final Project Documentation. Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:

a. Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.

b. Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.

c. Complete final cleanup in accordance with Section 40, paragraph 40-08, *Final Cleanup*.

d. Complete all punch list items identified during the Final Inspection.

e. Provide complete release of all claims for labor and material arising out of the Contract.

f. Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.

g. When applicable per state requirements, return copies of sales tax completion forms.

h. Manufacturer's certifications for all items incorporated in the work.

i. All required record drawings, as-built drawings or as-constructed drawings.

j. Project Operation and Maintenance (O&M) Manual(s).

k. Security for Construction Warranty.

I. Equipment commissioning documentation submitted, if required.

(See Specification 01700 – Contract Closeout for additional required documents.)

END OF SECTION 90

**SECTION 01010
SUMMARY OF WORK**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS: Contract Drawings, General Provisions, Supplementary Conditions, General Requirements, and other Special Provisions and Specifications apply to work of this section.

1.2 SUMMARY

- A. This Section includes the following:
- 1) Project information.
 - 2) Work covered by the contract.
 - 3) Work under separate contracts.
 - 4) Owner-furnished products
 - 5) Use of premises.
 - 6) Coordination with Airport and Tenants.
 - 7) Work restrictions.
 - 8) Specification and drawing conventions.

1.3 RELATED SECTIONS

- A. Related Sections include the following:
1. General Provision, Section 50 "Control of Work"
 2. Section 00 72 00, "General Conditions"
 3. General Provision Section 80, "Execution and progress"
 4. Section 01143, "Airport Project Work Procedures"
 5. Section 01500, "Temporary Facilities and Controls"
- B. If there is a discrepancy between the requirements of this Section and related Sections, the more restrictive interpretation shall apply.

1.4 PROJECT INFORMATION

- A. Jonesboro Municipal Airport – Maintenance Hangar Reconstruction, Jonesboro, Arkansas.
- B. Project Location: Jonesboro Municipal Airport.
- C. Owner: City of Jonesboro Airport Commission, Arkansas.
- D. Owner's Representative: George Jackson, Airport Manager

- E. A/E Design Professional: Charles Popovich, Architect; Michael Baker International; 1501 LBJ Freeway, Suite 650, Dallas, TX 75234. (469) 801-8500.

1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of this Project is defined by the Contract Documents, including, but are not necessarily limited to the following:
 - 1) New construction of a Maintenance Hangar building to replace an existing Maintenance Hangar damaged by a tornado replacing the destroyed facility in kind, based on the current codes and in accordance with FAA Regulations through an expeditious process. Existing site location will remain the same for the new facility, therefore no site improvements or site analysis are required for this project. New facility will tie-in to existing infrastructure and utilities in order to provide a complete and operational facility as generally defined by the Contract Documents and the 2012 International Building Code, Arkansas Fire Prevention Code, and other current codes as directed by the Authorities Having Jurisdiction for a complete and functional facility.
 - 2) Select demolition and related/select site work elements as required for the new GA Facility and related site improvements.
- B. Type of Contract: Project will be constructed under a Unit Price contract for the Maintenance hangar facility.

1.6 SUMMARY BY REFERENCES

- A. Work of the Contract can be summarized by references to the Contract, General Provisions, Supplementary Conditions, Specifications, Drawings, and Addenda and Modifications to the contract documents issued subsequent to the initial printing of this Project Manual, including but not necessarily limited to printed material referenced by any of these. It is recognized that work of the Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon including weather conditions, and other forces outside the contract documents.

1.7 CONSTRUCTION PHASING

- A. To minimize the impact to aircraft operations and airfield tenants, and to avoid construction during adverse weather seasons, the Contract shall be completed in phases as specified hereinafter as described on the plans. Each phase of the Contract shall be completed within the contract time as specified herein.

1.8 CONSTRUCTION TIME:

- A. Time Schedule: The work as described by the contract specifications and as shown on the plans shall be completed and ready for use by the Owner within **the number of consecutive days as negotiated by the Owner/Contractor**. The time schedule for

completion of this project is critical and liquidated damages as prescribed in the Contract will be enforced.

- B. January 1, Memorial Day, July 4, Labor Day, Thanksgiving, and December 25 will be considered as being holidays; no other days will be so considered. No construction observation will be furnished on legal holidays or Sundays, except in an emergency. The Contractor shall observe the legal holidays and Sundays, and no work shall be performed on these days except in an emergency.

All work to be performed by the Contractor on Saturdays shall be coordinated with the Engineer by the preceding Thursday afternoon.

1.9 LIQUIDATED DAMAGES:

- A. Owner and Contractor recognize that time is of the essence and that Owner will suffer financial loss if the work is not substantially complete in accordance with the time(s) specified herein. They also recognize the delays, expenses and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner the amounts stipulated hereinafter.
- B. Contractor further understands and hereby expressly agrees that in addition to liquidated damages specified hereinafter, to pay the Owner the actual costs to Owner for any inspector or inspectors necessarily employed by Owner on the work and the actual costs to Owner for the Engineer's observation of construction and project representative services including all travel and subsistence expenses after the date specified for Project completion until the work is completed and ready for final payment. Further, the Contractor agrees that the sums to be paid the Owner may be deducted from the sum due the Contractor for work performed as provided in Section 90 of the General Provisions.

The amount of Liquidated Damages to be assessed shall be in accordance with the schedule that follows:

1.10 LIQUIDATED DAMAGES SCHEDULE

- 1. Liquidated Damages - \$1,000 per day.

1.11 CONCURRENT WORK BY OWNER:

- A. Overlapping Work: The work to be performed may overlap work by others to be performed concurrently. Each Contractor shall coordinate and schedule his work with the knowledge that each may be working the same area simultaneously. Each Contractor will be expected to cooperate with the Engineer, Owner, and other Contractors in the completion of the work.

- B. Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.
- C. Concurrent Work: Owner has awarded separate contract(s) for the following construction operations at Project site. Those operations are scheduled to be occurring concurrently to work under this Contract.
 - 1. Concurrent Project: Airfield Rescue and Fire Fighting (ARFF) Building.
- D. Disputes: The Engineer, whose decision will be final, will decide any disputes arising between the Contractors.
- E. Coordination: Contractors shall coordinate their schedules and work activities very closely, including holding weekly meetings in the presence of the Engineer's onsite representative. Contractors must cooperate with each other, including working around each other's work activities. Potential delays as a result of lack of coordination will not be considered grounds for claim for additional time extensions and/or additional compensations.
- F. Concurrent Work – Owner Performed: Owner may perform work using his own forces at Project site. Those operations may be conducted simultaneously with work under this Contract, beyond the Maintenance Hangar facility site.

1.12 CONTRACTOR USE OF PREMISES:

- A. Use of the Site: The Contractor shall confine his operations at the site to the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work while engaged in project construction.
- B. Limit use of premises to work in areas indicated on the Drawings. Do not disturb portions of Project site beyond areas in which the Work is indicated or required for the proposed project.
- C. Open Passage: Keep existing drives, entrances, and air operations areas designated to remain open, clear, and available to the Owner, his employees and the public at all times. Do not use these areas for parking or storage of materials.
 - 1. Schedule deliveries to minimize use of roads, apron and driveways, and of security gates and entrances.
 - 2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- D. Storage: Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain Engineer's approval.
- E. Vehicle/Equipment Security: Lock automotive type vehicles, such as passenger cars and trucks, and other mechanized or motorized construction equipment, when parked

and unattended, to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place.

1.13 WORK RESTRICTION:

- A. NAVAID Areas: During the time of construction, the Contractor may be restricted from working in or around certain essential electronic navigational aids necessary to the safe operation of the airport. The Contractor is hereby notified that the Engineer may restrict construction operations in those areas closest to the active runway and taxiways.
- B. Radio Communication: Contractor shall maintain two-way radio communication with the Airport air operations personnel, on their frequency, at all times during construction. Contractor shall have a working radio on site at all times during construction and shall assign responsible personnel, including flagmen, to continuously monitor the radio. All radios shall be as specified in Section 01510.
- C. Notice to Airmen (NOTAMS): The Contractor shall provide the necessary information on construction conditions so that the Owner can advise the Flight Service Station to issue a NOTAM in accordance with established criteria. All requests for NOTAMS for taxiway closures shall be made at least 48 hours in advance (not including weekends) by the Contractor to the Engineer. All requests for closure of a runway or for moving into a phase that requires the closure of a Navaid shall be made at least 7 days in advance (not including weekends) by the Contractor to the Engineer.
- D. Turf Restoration: All non-paved areas that are disturbed by the Contractor's work, staging area, haul roads, etc. shall be reseeded and restored to original condition by the Contractor. Except where otherwise specified, there will be no separate pay item for this work; it will be considered incidental to and included in the price bid for Section 01000, Mobilization.
- E. Security: Contractor shall provide security within his construction area and shall keep all unauthorized personnel out.
- F. Haul Route on Airfield Pavement: Contractor will not be allowed to use any of the existing runways, taxiways, or aprons as part of the haul road unless authorized in writing by the Engineer.
- G. Access Points: All construction traffic shall enter and exit the project area only through the project access point(s) shown on the plans or approved by the Engineer. Contractor will be responsible for security of entrance gates under use by him/her.
- H. Construction Stakeout: The Contractor shall perform construction stakeout in accordance with Article 50-06 of the General Provisions.
- I. Haul Route: The Contractor shall be responsible for establishing haul routes suitable for supporting all necessary transportation and construction equipment for the duration of the project. Any existing roads or other areas that are used as part of the haul route shall be restored to their original condition after completion of the project. The Contractor will be responsible for all clean up operations of debris that may be on the haul route and for watering and/or other dust preventive measures to preclude fugitive dust from

affecting buildings, occupants, or airfield operations. No separate payment will be made for seeding or mulching, or pavement restoration; such costs will be incidental to and included in the price bid for Section 01000, Mobilization.

- J. Airfield Safety Devices: Contractor shall maintain all airfield safety devices such as staked limit lines for the duration of the project as required. Damaged stakes or flagging shall be replaced immediately.
- K. Vehicular Markings and Lighting: All vehicles and equipment used on the airfield shall meet airport requirements for marking and lighting.
- L. Contracts During Non-Working Hours: For the duration of the project, the Contractor shall designate a list of authorized individuals in a prioritized order, to be on 24 hour call, and these individuals shall be equipped with a beeper and cellular phone. These individuals shall be able to respond to any situation arising out of the performance of the work on this project, particularly during nighttime hours, and shall respond and be on the project site within one hour after the phone call or beep.
- M. Airfield Pavement Cleanup: The Contractor shall promptly clean any and all debris arising from the project work that is left on operational airfield pavement. The Owner may remove any debris attributable to the Contractor found to be a hazard to aircraft. A fee of \$250/hour will be assessed to the Contractor for all such cleaning and will be deducted on the next Contractor pay request.

1.14 COORDINATION:

- A. The work of this Contract includes coordination by the Contractor of the entire work of the project, including preparation of general coordination drawings, diagrams and schedules, and control of site utilization, from beginning of construction activity through project close-out and warranty periods.

1.15 OWNER'S OCCUPANCY REQUIREMENTS

- A. Full Owner Occupancy: Owner or, the Owner's tenants or FAA personnel will occupy the airport and adjoining facilities to the project site during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations.
 - 1) Maintain access to existing roadways, driveways, taxiways, runways and other adjacent occupied or used facilities. Do not close or obstruct roadways, taxiways runways, parking lots or other occupied or used facilities without written permission from Owner and Authorities Having Jurisdiction.
 - 2. Provide not less than seven days' notice to Owner of activities that will affect Owner's or Airport's operations.
- B. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before Substantial Completion, provided such occupancy does not interfere with completion of

the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. The Architect of Record will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied before Owner occupancy.
2. Obtain a Certificate of Occupancy from Authorities Having Jurisdiction before Owner occupancy.
3. Before partial Owner occupancy, life safety, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. Upon occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of building.
4. Upon occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of building.

1.16 PARTIAL OWNER OCCUPANCY OR USE:

- A. The Owner reserves the right to use completed and accepted work provided such use does not interfere with completion of other work. Such use will not affect warranty stipulations addressed elsewhere in the contract documents.

1.17 OWNER-FURNISHED PRODUCTS

- A. Owner will furnish products indicated. The Work includes receiving, unloading, handling, storing, protecting, and installing Owner-furnished products and making building services connections. These items may be procured through State contracts and turned over to the Contractor for installation and coordination with the new work.

1.18 DRAWING AND SPECIFICATION FORMATS AND CONVENTIONS

- A. Drawings and Specifications: The Drawings illustrate the general design intent, space requirements, and the minimum-base line-design requirements of the facility. These drawings are not intended to show a complete design; The Contractor shall be responsible for completing the delegated design for specific project elements requiring certification, further design refinement, and preparing the engineering (signed and sealed documents) for key delegated design elements required for construction of the facility as governed by all Authorities Having Jurisdiction or as outlined in the Contract Documents.
- B. Specification Format: Specifications are based on the Federal Aviation Administration (FAA) Standard Specifications for Specifying Construction of Airports as found in FAA Advisory Circular 150/5370-10H, The CSI Master Format 2016, ARDOT Standard Specifications for Road and Bridge Construction – July 2019 edition and non-standard specifications developed specifically for this project. The CSI Specifications are organized into Divisions and Sections using the 16-division format and CSI/CSC's "MasterFormat" numbering system.
 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as

appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

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

PART 2 - PRODUCTS (Not Used.)

PART 3 - EXECUTION (Not Used.)

END OF SECTION 01010

SECTION 01030
AIRPORT PROJECT PROCEDURES

PART 1 - GENERAL

- 1.1 INTRODUCTION: This project will include Contractor operations within or near active Air Operations Areas (AOA). The Airport will conduct normal aircraft operations during the course of this project, subject to certain restrictions called out in this section or elsewhere in the specifications. Therefore, to provide for the security and safety of Airport users and the Contractor's forces, as well as to minimize interruptions to aircraft operations, the Contractor shall limit his work within the areas designated and conduct his operations as specified.
- 1.2 Any fines or assessments levied against the Sponsor as a result of unauthorized intrusions in the AOA or other violations by the Contractor's personnel or those of his subcontractors will be passed on to the Contractor. In addition, the Contractor will be subject to a fine of \$1,000.00 per incident, assessed by the Sponsor.
- 1.3 AIR OPERATION AREA (AOA) SAFETY REQUIREMENTS:
- A. Barricades: Existing runways, taxiways and aprons outside the limits of construction shall be separated from construction areas with barricades as shown on the plans and described in Section 01530.
 - B. Radio Communication: The Contractor shall monitor radio communications with Air Traffic Control (ATC) at all times during construction and shall immediately obey all instructions to vacate areas when directed. Contractor shall have a working radio as specified in Section 01510 on site at all times during construction and shall assign responsible personnel to continuously monitor the radio.
 - C. Runway and Taxiway Closures: Only the Owner will make Closures of runways and taxiways. The Owner shall contact the appropriate FAA Flight Service Station prior to issuing the Notice-to-Proceed so that a Notice-to-Airmen (NOTAM) for runway or taxiway closure can be issued in accordance with established criteria. Construction operations within the runway or taxiway safety zone shall not begin until the Contractor receives clearance from the Owner and Engineer assuring that the adjoining runway or taxiway has been closed.
 - D. Navigational Aid Equipment: The project will be phased to permit work outside of and around certain FAA navigational aid (NAVAID) equipment such as approach light systems, localizer antenna, glide slope antenna, RVR projectors, middle and inner markers, etc. The Contractor shall notify the Engineer at least 7 days prior to disassembling or working around any NAVAID equipment so that a NOTAM can be issued indicating that the affected NAVAID will be impacted.

1.4 CONSTRUCTION SAFETY REQUIREMENTS:

A. General:

1. **Safety Officer:** The Contractor is required to employ/designate a Safety Officer who will be the liaison between the Contractor, the Engineer and the Owner in all safety related matters for the duration of the project. The Safety Officer shall be on call 24 hours per day for emergency maintenance of airport hazard lighting, barricades, and other safety features. The project foreman may serve in this capacity.
2. **Protection of Utilities:** The Contractor shall be responsible for field marking and protecting all utilities within the construction limits.
3. **Storage of Equipment, Vehicles, and Materials:** All equipment, vehicles, and materials must be stored in the designated storage or staging area or in areas acceptable to the Engineer.
4. **Vehicular Markings:** Contractor vehicles and equipment shall be marked with checkered flags and lighted with flashing beacons to comply with requirements of FAA AC 150/5210-5D. All vehicles and equipment shall display 3' x 3' flags, orange and white "checkerboard" pattern, with the squares being 1' x 1' each. All vehicles and construction equipment working during the night shall be equipped with an amber colored rotating beacon light.
5. **Construction Methods Limitation:**
 - a. No open flames or burning will be allowed on Airport property except as specifically authorized by the Engineer in writing.
 - b. Stockpiled material shall be constrained in a manner to prevent displacement by jet blast, prop blast, or wind, and shall be kept to a height that will not penetrate FAR Part 77 imaginary air space.
6. **Safety and Accident Protection:**
 - a. The Contractor shall comply with all applicable federal, state, and local laws, ordinances, and regulations governing safety, health, and sanitation; shall provide barricades; and shall take any other needed actions, on his own responsibility, that are reasonably necessary to protect the life and health of employees on the job, the safety of airport users, the safety of moving and parked aircraft, and other property during the performance of the work.
 - b. The Safety Officer's duties shall include accident prevention.
7. **Navigational Aids:** Airport navigational aid critical areas are shown on the drawings or will be indicated by the Engineer. The Contractor shall not enter these areas without the Engineer's approval.

B. Runway and Taxiway Safety Zones:

1. Limitations: When necessary to accomplish construction in areas adjacent to runways and taxiways, the construction equipment, vehicles, and men are authorized to operate without interruption within the project limits, except within the following areas and as specified otherwise:
 - a. Distance from runway centerline or runway end
 - 1) - Within 200 feet.
 - b. Distance from active taxiway centerline
 - 1) - Within 40 feet.
 - c. Runway approach areas
 - 1) - Within 20:1 34:1 50:1 approach surface slopes as shown on drawings.
 2. Request for Facility Closures: Construction activities on runways or taxiways or within the above-restricted areas shall only be performed at times when the runway or taxiways are closed to aircraft. The Contractor through the Engineer thereof must request closure of a runway or taxiway in advance.
 3. Equipment Operation Restrictions: Contractor may be permitted to operate trenching machines and other equipment in the Runway and Taxiway Safety Zones provided all of the following conditions are satisfied:
 - a. The equipment operator and/or crew foreman monitors Unicom frequency continuously, using a two-way radio transceiver.
 - b. All equipment shall be cleared from the Runway or Taxiway Safety Zones during aircraft operations (landings, take-offs, and taxiing).
 - c. All equipment within the Runway and Taxiway Safety Zones is manned and being used. No unnecessary or parked equipment will be allowed within the Runway and Taxiway Safety Zones.
 - d. All excavated trenches and holes shall be backfilled, tamped and leveled to match existing grades before workmen leave the site at the end of each workday.
 4. Stockpiles: Stockpiled materials shall not be permitted within the runway or taxiway safety zones.
 5. Grading Requirements: All construction within a restricted area shall be performed in such a manner that, at the end of the closure period, it will leave the safety area with no abrupt grade changes or grades in excess of 5 percent, and with no trenches with depth or width greater than 3 inches.
- C. Obstructions to Navigation:
1. Violation of Safety Zone Surfaces: Penetration of equipment, vehicles, materials, or men into the safety zones and approach surfaces requires the preparation and distribution of Notices to Airmen (NOTAM) in advance to the actual penetration.
 2. Scheduling: When part of the work in this project is in violation of FAR Part 77, the clearance distance requirements from runway and taxiway edges shall be incorporated into the construction sequence schedule. At no time shall the

construction limits of the area under construction violate the safety zones without prior notification to and approval by the Engineer.

3. Coordination and Communication: Work within and adjacent to active AOAs shall be coordinated with the Engineer prior to commencement of the activity. The construction superintendent and the resident inspector, both of which shall constantly monitor Unicom Frequency, shall accompany work crews in these areas.

- 1.5 SAFETY PLANNING: The Contractor shall integrate and maintain requirements of airport operational safety into each planning and work schedule. The Contractor's Safety Officer shall continuously monitor all planning schedules and work underway for compliance to AC 150/5370-2 (Latest Edition); and shall maintain vigilance to detect areas needing attention due to oversight or altered construction activities. Airport operational safety during construction will be on the agenda at the preconstruction conference and each coordination and progress meeting.
- 1.6 SECURITY REQUIREMENTS: The Contractor has the responsibility for maintaining control of the access gates or any other entrance to the AOA. The Contractor may utilize a gate guard or install an automatic operated gate controller with limited access with numeric keypad. The Contractor may be required to erect temporary fencing to protect the AOA during construction. The Contractor's method of maintaining security shall be set forth in his Security Plan and shall comply with the airport's rules and regulations concerning work in the airport restricted areas. There will be no separate measurement or payment for gate guards or temporary fencing required maintaining the integrity of the AOA.
- 1.7 TEMPORARY RELOCATED AND DISPLACED THRESHOLDS: Prior to initiating work in any area or phase of the project where a temporary relocated runway threshold is required, the Contractor shall provide the relocated runway threshold as indicated and scheduled. The relocated threshold shall remain in effect until all work in the area or phase is complete and accepted by the Engineer.
- 1.8 BARRICADES: Contractor shall provide barricades along active taxiway pavement areas, closed sections of the runway, and elsewhere as shown on the plans or directed by the Engineer while work is proceeding in the runway, taxiway, and apron areas. Barricades shall be sited and relocated during the course of the work to clearly identify areas closed to aircraft operations.
- 1.9 RUNWAY AND TAXIWAY CLOSURES:
 - A. When a runway is required to be closed during any phase of the work and aircraft must access another runway during this period, at least one taxiway serving the air carrier apron and one taxiway serving the general aviation apron must remain open

for this purpose at all times. The Contractor shall schedule his work to provide continuous access as described above. Barricades and/or closed runway or taxiway markers shall be placed as directed by the Engineer.

- B. The Contractor shall coordinate and schedule runway and taxiway closures in advance and temporary relocation of any runway threshold with Owner through Engineer before closure is required so that Owner can issue appropriate NOTAMS.
- C. Contractor shall identify runway/taxiway closures with barricades and by covering runway/taxiway lights within the closure limits. Remove barricades and covers when no longer needed or as directed by Engineer.

PART 2 - PRODUCTS

2.1 BARRICADES AND CLOSED RUNWAY MARKERS: Barricades and Closed Runway Markers, when required, shall be constructed as specified in Section 01530.

2.2 TEMPORARY RELOCATED (OR DISPLACED) THRESHOLD:

- A. Paint materials and application rate for temporary marking shall conform to the requirements of Item P-620.
- B. Cable and L-823 connectors shall conform to applicable FAA Advisory Circulars. It will be the Contractor's responsibility to verify the electrical characteristics of the existing airport lighting system.
- C. Lighted Threshold:
 - 1. Install the threshold light fixtures, base plates and L-830 transformers as indicated. Remove the red/green split lens from the existing runway threshold lights indicated and place on the temporary relocated threshold lights.
 - 2. Connect the lights to the existing runway circuit at the existing lights as shown on the plans.
 - 3. The temporary runway threshold light fixtures, base plates, and L-830 transformers shall be installed on 4x4 timbers as shown on the plans. Anchor the 4x4 wood frames and temporary lighting cables above ground with sandbags.
 - 4. Upon completion of work in the phase, remove temporary relocated runway threshold lights, base plates, transformers, and 4x4 timber frames and return all red/green split lens to the original runway threshold lights and restore runway lighting circuit to operational condition.
- D. Contractor shall cover or turn off existing medium intensity approach lighting system (MALS) before relocating threshold.

- E. Runway Markings: The temporary relocated runway threshold markings and covers for existing runway numbers shall be placed as indicated on the plans. Upon satisfactory completion of work in the phase, all temporary relocated runway threshold markings and number covers shall be removed methods approved by the Engineer.
- 2.3 RUNWAY NUMBER COVERS: Runway number covers shall be constructed as specified in Section 01530.

PART 3 - EXECUTION

- 3.1 LIMITATION OF CLOSURES: The Contractor shall be responsible for all supply and installation, and relocation as needed of all materials involved in runway closures.
- 3.2 BARRICADE AND CLOSED RUNWAY MARKERS INSTALLATION: Install barricades and closed runway markers at locations shown on the drawings and where directed by Engineer. Anchor barricades and closed runway markers as specified in Section 01530. Maintain barricades and closed runway markers until removal is directed by Engineer. Barricade batteries shall be checked daily to insure adequate operation of the flashers during the night. Replace batteries as required. Upon removal of barricades and closed runway markers, repair any damage to pavement or surrounding area caused by barricades and closed runway markers.
- 3.3 TEMPORARY RELOCATED OR DISPLACED THRESHOLD:
- A. Painted markings shall be applied after the runway has been closed to aircraft operations. Concurrent with the application of paint will be the placement of the barricades as shown on the plans. Edge lighting shall be adjusted as shown on the plans.
 - B. The Contractor shall coordinate the temporary relocation of the thresholds with the Owner and Engineer and shall not perform this work until authorized by the Engineer.
- 3.4 MEASUREMENT AND PAYMENT:
- A. Temporary Relocated Threshold: The provision and removal as required of temporary relocated or displaced threshold at the runway end shown on the plans will be measured and paid for at the contract unit price of lump sum, complete. This payment shall be full compensation for all labor, materials, equipment, tools, and incidentals necessary for installing and removing the light fixtures, base plates, transformers, L-824 5KV cable, and all L-823 connector kits, replacement of lens on runway lights, temporary markings, and all other items required to complete the work.

B. Except as otherwise specified above or in Section 01530, no measurement or payment will be made for safety requirements specified herein; costs of these requirements and limitations will be considered as incidental to Mobilization, Section 01000.

1. Payment will be made under:

a. Item 01030 Temporary Relocated Threshold – per Lump Sum

3.5 MEASUREMENT AND PAYMENT: Except as otherwise specified in Section 01530, no measurement or payment will be made for work in this section; it will be considered as incidental cost to Mobilization and other items of work.

END OF SECTION 01030

**SECTION 01040
PROJECT COORDINATION**

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS: All Contract Documents and drawings apply to work of this section.
- 1.2 DESCRIPTION OF WORK: Administrative and supervisory requirements necessary for coordination of work on the project include but are not necessarily limited to the following:
1. Coordination and meetings.
 2. Surveys and records or reports.
 3. Limitations on use of site.
 4. Special reports.
 5. General installation provisions.
 6. Cleaning and protection.
 7. Conservation and salvage.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTIONS

- 3.1 COORDINATION AND MEETINGS:
- A. Preconstruction Conference: A Preconstruction Conference will be scheduled after award of Contract and prior to issuance of a Notice to Proceed. Key Project personnel representing the Prime Contractor and all major Subcontractors will be required to attend this Conference. All other parties involved with this Project, such as the Owner, Engineer, and FAA, will also be represented. All affected parties at the Preconstruction Conference will review the entire Construction Schedule carefully. The Contractor shall prepare a detailed Construction Schedule for review prior to and at the Preconstruction Conference.
 - B. Coordination Meetings: The Contractor shall meet regularly with the Engineer and the Owner's designated representative to coordinate construction and airport operations.
 - C. Schedule Updating: Revise the construction schedule after each significant milestone or as requested by the Owner, where revisions to the schedule have been made or recognized.

3.2 SURVEYS AND RECORDS/REPORTS:

- A. Construction Staking: The Contractor shall take all necessary precautions to prevent the loss or damage of primary control points. The Contractor will be responsible for staking required for construction. Working from lines and levels established by the design survey, establish and maintain benchmarks and other dependable markers required for construction. Establish benchmarks and markers to set lines and levels for work at each stage of construction and elsewhere as needed to properly locate each element of the project. Calculate and measure required dimensions as shown within recognized tolerances. Drawings shall not be scaled to determine dimensions. Advise entities performing work of marked lines and levels provided for their use.
- B. Survey Procedures: Before proceeding with the layout of actual work, verify the layout information shown on the drawings, in relation to the property survey and existing benchmarks. As work proceeds, check every major element for line, level and plumb. Maintain a surveyor's log or record book of such checks; make this log or record book available for the Engineer's reference. Record deviations from required lines and levels and advise the Engineer promptly upon detection of deviations that exceed indicated or recognized tolerances. Record deviations, which are accepted, and not corrected, on record drawings. Survey work shall be performed by and under supervision of a professional (registered) land surveyor in the State where the project is located.
- C. Quality of Work: The elevations of permanent and temporary benchmarks shall be determined and recorded to the nearest 0.01 foot. Differential leveling and transit traverses shall be of such precision that the error of vertical closure in feet shall not exceed plus or minus 0.1 foot in 5000 feet. The angular error of closure for transit traverses shall not exceed 1.0-minute times the square root of the number of angles turned.
1. Slope stakes shall be placed, as a minimum, at 100-foot stations, breaks in the original ground surface, and at any other intermediate stations necessary to insure accurate location for construction layout and measurement. Slope stakes and cross sections shall be perpendicular to the centerline. Significant breaks in grade shall be determined for cross sections. Distances shall be measured horizontally and recorded to the nearest 0.1 foot. Side shots for interim construction stakes may be taken with a hand level.
- D. Records: All survey data shall be recorded in fully identified, standard hardbound engineering survey field notebooks with consecutively numbered pages. All field notes and printed data shall include the purpose or description of the work, the date the work was performed, weather data, sketches and the personnel who performed and checked the work. Electronically generated survey data and computations shall be bound, page numbered and cross-referenced in a bound field notebook containing the index for all survey data.
1. The construction survey records shall be available at all times during the progress of the work for examination and use by the Engineer and copies shall be made available to the Engineer upon request. The original field notebooks and other records shall be turned over to and become the property of the Owner prior to final acceptance of the work.

3.3 LIMITATIONS ON USE OF THE SITE:

- A. General: Limitations on site usage as well as specific requirements that impact site utilization are indicated on the drawings and by other contract documents. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
- B. Waste Disposal: Waste materials shall be disposed of off airport property except as specified otherwise in Contract Documents.

3.4 MEASUREMENT AND PAYMENT: No measurement or payment will be made for work in this section; it will be considered as incidental cost to Mobilization and other items of work.

END OF SECTION 01040

**SECTION 01060
CONTROL OF EROSION, SILTATION AND POLLUTION**

PART 1 - GENERAL

- 1.1 **REQUIREMENTS:** The Contractor shall take all measures necessary to minimize soil erosion, situation, water pollution, and air pollution caused by his operations. The Contractor shall comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. The Contractor shall keep himself fully informed of all such regulations which in any way affect the conduct of the work and shall at all times observe and comply with all such regulations. In the event of conflict between such regulations and the requirements of the specifications, the more restrictive requirements shall apply.

The contractor is responsible for obtaining an NPDES permit as well as any state or local land disturbance permits necessary to complete the work. The contractor is also responsible for implementing the Comprehensive Monitoring Program required by the NPDES permit and/or state or local land disturbance permits, as well as any fees associated with permit.

The Contractor shall produce, execute, and maintain his/her own Pollution Prevention Plan conforming to all applicable federal, state, and local regulations. This includes preparation and payment of a Storm Water Pollution Prevention Plan and fees associated with submitting a Notice of Intent to ADEQ for authorization.

- 1.2 The Engineer will limit the area over which clearing, grubbing, excavation, borrow, and embankment operations are performed whenever the Contractor's operations do not make effective use of construction practices and temporary measures which will minimize erosion, or whenever effective erosion control features are not being completed as soon as permitted by construction operations.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

- 3.1 EROSION AND SILTATION CONTROL: The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent the eroding of soil and silting of rivers, streams, lakes, reservoirs, other impoundments, ground surfaces, or other property. Prior to suspension of operations on the project or any portion thereof, the Contractor shall take all necessary measures to protect the construction area, including but not limited to borrow pits, soil type base courses, and waste areas, from erosion during the period of suspension.

Suggested temporary erosion control measures are included on the drawings, and shall be adhered to except as approved by the engineer, but may not necessarily represent all of the work items that may be required. See Item C-102, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control for additional guidance.

3.2 COORDINATION OF EROSION CONTROL OPERATIONS:

- A. Temporary and permanent erosion control measures shall be provided as shown on the plans or as directed by the Engineer. All permanent erosion control work shall be incorporated into the project at the earliest practicable time. Temporary erosion control measures shall be coordinated with permanent erosion control measures and all other work on the project to assure economical, effective, and continuous erosion control throughout the construction and post construction period and to minimize situation of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces, or other property.
- B. Temporary erosion control measures shall include but not be limited to the use of temporary beams, dikes, dams, silt fences, drainage ditches, silt basins, diversion ditches, slope drains, structures, vegetation, mulches, mats, netting, gravel, rip rap, or any other methods or devices that are necessary. Temporary erosion control measures may include work outside the construction limits where such work is necessary as a result of construction such as borrow pit operations, haul roads, plant sites, equipment storage sites, and disposal of waste or debris. The Contractor shall be liable for all damages to public or private property caused by silting or slides originating in waste areas furnished by the Contractor.

- 3.3 Materials for temporary erosion control measures shall be approved by the Engineer before being used or shall be as directed by the Engineer. Materials and all work under this section shall be in accordance with SECTION 621 – TEMPORARY EROSION CONTROL ITEMS AND DEVICES, Standard Specifications, except as modified or augmented herein, or otherwise specified in Item C-102, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control for

- A. The Contractor shall acceptably maintain erosion control measures installed by the Contractor.

3.4 WATER AND AIR POLLUTION:

- A. The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent pollution of rivers, streams, and water impoundments. Pollutants such as chemicals, fuels, lubricants, bitumen, raw sewage, and other harmful waste shall not be discharged into or alongside of rivers, streams, or impoundments, or into natural or manmade channels leading thereto.
- B. The Contractor shall comply with all Federal, State or local air pollution regulations throughout the life of the project.

3.5 OPEN BURNING OF COMBUSTIBLE WASTES: NOT PERMITTED.

3.6 DUST CONTROL:

- A. The Contractor shall control dust throughout the life of the project within the project area and at all other areas affected by the construction of the project, including, but not specifically limited to unpaved roads, haul roads, access roads, disposal sites, borrow and material pits, and production sites. Dust control shall not be considered effective where the amount of dust creates a potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property.
- B. The Contractor will not be directly compensated for any dust control measures necessary; this work will be considered incidental to the work covered by the various contract items.

3.7 APPLICATION OF SPECIFICATIONS: The provisions of this section shall apply to all construction operations. Further references and detailed requirements concerning erosion, situation, and pollution prevention and control, may be given in other sections of the specifications and on the drawings.

3.8 TEMPORARY SUSPENSION OF WORK: Failure of the Contractor to fulfill any of the requirements of this section may result in the Engineer ordering the stopping of construction operations in accordance with the following:

- A. The Engineer shall have the authority to suspend the work wholly or in part by written order, for such periods as he may deem necessary due to conditions considered unfavorable for the suitable prosecution of the work, or to failure on

the part of the Contractor to correct conditions unsafe for workmen or the general public or to carry out orders given or to perform any provisions of the contract. Such suspension of operations will not justify an extension of contract time.

Failure on the part of the Contractor to perform the necessary measures to control erosion, situation, and pollution will result in the Engineer notifying the Contractor to take such measures. Any fine, penalty or other cost assessed by State, local or other governmental agencies for non-performance of erosion, situation or pollution controls against the Owner shall become the responsibility of the Contractor; such assessments, if not paid by the Contractor, shall be deducted from monies due the Contractor at the completion of the job. In the event that the Contractor fails to perform such measures within 24 hours after receipt of such notice, the Engineer may suspend the work as provided above, or may proceed to have such measures performed by others. The cost of such work performed by others will be deducted from monies due the Contractor on his contract.

END OF SECTION 01060

SECTION 01090 REGULATIONS AND DEFINITIONS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS: Drawings, General Provisions, Supplementary Conditions, Specifications, and other contract documents apply to work of this section. See Section 10 of General Provisions for additional definitions.
- 1.2 DESCRIPTION OF REQUIREMENTS:
- A. General: This section specifies procedural and administrative requirements for compliance with governing regulations, codes and standards imposed upon the work. These requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with regulations, codes and standards.
 - B. The term "Regulations" is defined to include laws, statutes, ordinances and lawful orders issued by governing authorities, as well as those rules, conventions and agreements within the construction industry which effectively control the performance of the work regardless of whether they are lawfully imposed by governing authority or not.
 - C. Governing_Regulations: Refer to General Provisions, Supplementary Conditions, and General Requirements for requirements related to compliance with governing regulations.
- 1.3 DEFINITIONS:
- A. General_Explanation: Certain terms used in contract documents are defined in this article. Definitions and explanations contained in this section are not necessarily complete but are general for the work to the extent that they are not stated more explicitly in another element of the contract documents.
 - B. General_Requirements: Provisions and requirements of Division 1 sections apply to the entire work of the contract and, where so indicated, to other elements which are included in the project.
 - C. Indicated: The term "indicated" is a cross-reference to graphic representations, notes or schedules on the drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown", "noted", "scheduled", and "specified" are in lieu of "indicated", it is for the purpose of helping the reader

locate the cross-reference, and no limitation of locations is intended except as specifically noted.

- D. Directed, Requested, etc.: Terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Engineer", "requested by the Engineer", and similar phrases. However, no such implied meaning will be interpreted to extend the Engineer's responsibility into the Contractor's area of construction supervision.
- E. Approved: Where used in conjunction with the Engineer's response to submittals, requests, applications, inquiries, reports and claims by the Contractor, the term "approved" will be held to limitations of the Engineer's responsibilities and duties as specified in General Provisions and Supplementary Conditions. In no case will the Engineer's approval be interpreted as a release of the Contractor from responsibilities to fulfill requirements of contract documents or acceptance of the work, unless otherwise provided by requirements of the contract documents.
- F. Project Site: The term "project site" means the space available to the Contractor for performance of the work, either exclusively or in conjunction with others performing other construction as part of the project. The extent of the project site is shown on the drawings.
- G. Furnish: The term "furnish" is used to mean "supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations."
- H. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations."
- I. Provide: The term "provides" means "to furnish and install, complete and ready for the intended use."
- J. Installer: The "installer" is the "the entity" (person or firm) engaged by the Contractor, its subcontractor or sub-subcontractor for performance of a particular element of construction at the project site, including installation, erection, application and similar required operations. It is a requirement that installers are experienced in the operations they are engaged to perform.
- K. Engineer: The A/E firm contracted by the City of Jonesboro to prepare the Design Documents.
- L. Design or Contract Documents: The drawings, specifications and Instruction to Bidders that indicate the project requirements and the Contractor's contractual obligations for the construction of the proposed project.

- M. Owner: Shall mean City of Jonesboro Airport commission and Airport Manager.
 - N. Owner's designated representative: Shall mean City of Jonesboro Manager, Airport Staff, or consultants contracted by the City of Jonesboro or designated by the Airport Director to act as representatives of the Owner.
 - O. Contractor – Shall mean the entity or corporation contracted by the City of Jonesboro to perform the scope of work.
 - P. AHJ: "Authority Having Jurisdiction" – Shall mean the local Building Department or other regulatory agency having jurisdiction for reviewing the scope of work and verifying compliance with governmental regulations (and monitoring compliance where applicable).
 - Q. A/E of Record: The term of "A/E of Record" (Architect or Engineer of Record), "Architect," "Engineer," "Landscape Architect," "Structural Engineer," shall mean the Architect or Engineer or Landscape Architect responsible for generating the permit documents required for construction of the facility.
 - R. RPR: "Resident Project Representative," Shall mean the Owner's representative (Airport Staff or Consultant), employed or contracted by the City of Jonesboro to review and monitor the general quality of the work, the general compliance with the Contract Documents, the progress of work and construction activities performed by the Contractor. This representative shall not alleviate or supplant the Contractor's required inspection and supervision of the construction activities.
- 1.4 SUBMITTALS: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 1090

**SECTION 01135
WEATHER DELAYS**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specifications Sections apply to this Section.
- B. If there is a discrepancy between the requirements of this Section and related Sections, the more restrictive interpretation shall apply.

1.2 EXTENSIONS OF CONTRACT TIME:

- A. If the basis exists for an extension of time in accordance with General/Supplementary Conditions, an extension of time 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.

1.3 STANDARD BASELINE FOR AVERAGE CLIMATIC RANGE:

- A. The Owner has reviewed weather data available from the National Oceanic and Atmospheric Administration (NOAA) and determined a Standard Baseline of average climatic range for the Jonesboro Municipal Airport.
- B. Standard Baseline shall be regarded as the normal and anticipatory number of calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of precipitation in excess of one-tenth inch (0.10") liquid measure or other 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 (based upon interpretation of NOAA data for rain and temperature) established for this contract is Attached following this Section: This shall also be considered as typical weather delays as referred to in the Contract Documents.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7	7	6	6	5	4	4	4	4	5	6	7

1.4 ADVERSE WEATHER AND WEATHER DELAY DAYS:

- A. 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:

1. Precipitation (rain, snow, or ice) in excess of one-tenth inch (0.10") liquid measure.
 2. Temperatures which do not rise above 32 degrees F by 10:00 a.m.
 3. Temperatures which do not rise above that specified for the day's construction activity by 10:00 a.m., if any is specified.
 4. Sustained wind in excess of twenty-five (25) m.p.h.
 5. Standing snow in excess of one inch (1.00").
 6. Any day that the Owner has requested no work to be performed.
- B. 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 workday, including a weekend day or holiday if Contractor has scheduled construction activity that day.
- C. Adverse Weather may include "dry-out" or "mud" days, as determined by the Engineer/Architect such as:
1. For rain days above the standard baseline.
 2. Only if there is a hindrance to site access or sitework, such as excavation, embankment, backfill, footings, etc. (see 4. & 5. below).
 3. At a rate no greater than one (1) make-up day for each day or consecutive days of rain beyond the standard baseline that total 0.1 inch or more, liquid measure, if no substantial work is possible (see paragraphs 4 & 5 below), unless specifically recommended otherwise by the Engineer/Architect.
 4. If the Contractor's activity is limited to approximately 50% of the Contractor's activity before the Adverse Weather occurrence, then one-half ($\frac{1}{2}$) a weather delay day will be counted. For example, if the Contractor is disking excavation and embankment areas to dry in situ moisture in the soils or hauling and placing unclassified excavation or borrow material to the embankment before an Adverse Weather occurrence but is able to continue disking excavation and embankment areas or placing unclassified excavation or borrow material, one-half ($\frac{1}{2}$) a Weather Delay Day will be allowed.
 5. If the Contractor's activity is limited to minor activity when compared to the Contractor's activity before the Adverse Weather occurrence, then one (1) weather delay day will be counted. For example, if the Contractor is disking excavation and embankment areas to dry in situ soils, hauling borrow material to embankment before an Adverse Weather occurrence, but is only able to disk excavation and embankment areas to dry them due to the Adverse Weather occurrence, one (1) Weather Delay Day will be allowed.
- D. If the Contractor is able to only perform disking operations to dry excavation and embankment areas due to in situ moisture in the soil, this is not considered an Adverse Weather occurrence or a Weather Delay Day and is considered to be a part of normal construction activities whether any other work can be performed or not.
- E. If requesting time extension due to weather delays, the Contractor shall compile monthly weather data from the Local National Weather Station or from on site observations to support the request.

- F. The Owner will utilize monthly weather data from the Local National Weather Station or from on-site observations to evaluate weather related delays; the determination of Contractor's entitlement for any Weather Delay days, as defined hereinabove, will be based on the entire construction duration of the phase in lieu of a month-by-month consideration. The entitlements will consider those months that conditions are better or worse than the Standard Baseline established for this contract.

For Example:

- 1) If the total number of standard baseline days for a Phase is forty-one (41) days and there are thirty-six (36) days with precipitation in excess of one tenth inch (0.10") liquid measure and ten (10) weather delay days, giving a total of forty-six (46) rain and weather delay days. This would amount to five (5) days in excess of the total baseline days for that Phase. Five (5) additional days will be added to the time for that Phase.
 - 2) If the total standard baseline for a Phase is forty-one (41) days and there are twenty (28) days with precipitation in excess of one tenth inch (0.10") liquid measure and nine (9) weather delay days, giving a total of thirty-seven (37) rain and weather delay days. This would amount to four (4) days better than the total baseline days for that Phase. Four (4) days will be deducted from the time for that Phase.
- G. Baseline days will be prorated when partial months are a part of a phase/stage or the overall contract time. For example:
- 1) If the contract or a phase begins on April 11, including April 11, there are twenty (20) calendar days remaining in April. Twenty (20) remaining calendar days divided by thirty (30) total calendar days in April equals 0.6667. Six (6) total baseline days established for April multiplied times 0.6667 equals four (4) baseline days for the remaining twenty calendar days in April.
- H. Paragraph 1.3C above establishes a standard baseline of anticipated number of days of lost construction time for each month.
- 1) To calculate any liquidated damages for a phase/stage that is not completed on time, the number of baseline days for the actual total construction time for that phase/stage will be calculated from the standard baseline.
 - 2) The number of weather delay days for the actual total construction time for that phase/stage will be calculated.
 - 3) The difference in weather delay days and baseline days will then be calculated. Months that have less weather delay days than baseline days will result in a negative number.
 - 4) The resulting difference will then be added to the contract time for the phase/stage.
 - 5) The difference in the actual total construction time and the contract time plus weather delay days in excess of the baseline for that phase/stage will determine if and what the actual amount of liquidated damages for that phase/stage will be.
- I. Throughout the duration of the contract, the Contractor and Owner shall reconcile impacts due to weather on a monthly basis. If time extension is desired for any month during construction, the Contractor shall submit monthly with the pay request an itemized list of; days impacted by weather, scheduled activity that was impacted and

the impact which caused the delay (temperature, mud, snow, etc.). Extensions will be considered on a monthly basis only.

END OF SECTION 01135

**SECTION 01140
WORK RESTRICTIONS**

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 50, "Control of Work"
 - 2) Section 00 72 00, "General Conditions"
 - 3) General Provision Section 80, "Execution and Progress"
 - 4) Section 01010, "Summary of Work"
 - 5) Section 01143, "Airport Project Work Procedures"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SEQUENCING:

- A. The Contractor shall schedule his work activities in accordance with requirements of the Safety and Work Area Plans, and these Specifications unless otherwise approved by the Owner.

1.3 USE OF PREMISES

- A. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
- B. Limits: Confine construction operations to areas indicated in the documents and necessary to the progress of the Work.
- C. Owner Occupancy: Allow for Owner occupancy of site and use by the public. The Owner will endeavor to cooperate with the Contractor's operations when the Contractor has notified the Owner in advance of need for changes in operations in order to accommodate construction operations. Conduct the work so as to cause the least interference with the Owner's operations.
- D. Driveways and Entrances: Keep aprons, driveways, roadways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
- E. Schedule deliveries to minimize use of driveways, roadways and entrances.

- F. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- G. Delivery vehicles, construction vehicles and other construction related hauling vehicles are restricted to the hauling/travel routes identified on the Site Plan, unless otherwise authorized, in writing, by the Owner.
- H. Storage areas will be available on site; limited staging and storage areas will be available adjacent to new building.

1.4 OCCUPANCY REQUIREMENTS

- A. Full Owner Occupancy: Owner will occupy the existing aprons, parking lots and airport facilities during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations.
- B. Existing Utilities: Disruption of utility services to the existing airport facilities will not be acceptable. The Contractor shall schedule all utility tie-ins with local utility service providers, and with the Owner a minimum of seven (7) calendar days before service interruption is scheduled to occur. The Contractor shall schedule utility tie-ins during off-peak hours to minimize disruption of airport operations, unless otherwise noted. Utility service shall not be disrupted for more than four (4) hours. Off-peak hours are defined as 8:00 p.m. to 7:00 a.m.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 COORDINATION WITH OCCUPANTS

- A. Occupied areas include all areas in which the Owner's regular operations will be going on or to which the Owner requires access during the construction period, whether conducted by the Owner or his tenants, clientele, or the public.
- B. Construction related activities, in general, may proceed during normal working hours, unless the work will interfere with operating procedures of the Airport. When this interference occurs, the Contractor shall arrange the required activities and work schedule to be performed during non-operating hours of the area of the Airport affected. The existing facilities are generally in operation during daytime hours, seven days per week. The Contractor shall have the option of working areas which are not in operation when the construction activities cause neither interference nor safety or security problems to the users of the Airport.
- C. Limit access through occupied site areas to those days and times, which the Owner approves.

- D. The Contractor shall review the plans and shall submit an updated layout plan for providing safe and secure passageway for users of the Airport during construction activities. Any access or egress routes, which are required exits in accordance with the code, shall be maintained at all times during the construction of any given area.
- E. When the following must be modified, provide alternate facilities acceptable to the Owner:
 - 1) Site entrances and parking lots which must remain open.
 - 2) Perimeter fencing and gates which are part of the Airport's Air Operations Area (AOA) demarcation shall remain secured at all times.
 - 3) Utilities which must remain in operation.
 - 4) Informational signage to direct the movement of airport patrons, tenants, clientele, or the public.

3.2 UTILITIES

- A. Utilities are located within the construction area. Contractor shall coordinate with the Owner, the Contractor's surveyor, utility locate services, and Engineer to identify all utilities. Contractor shall be responsible for contacting utility owners and locating all existing utilities within the work area. Contractor shall be responsible for costs associated with utility location, protection, and for required repairs due to failure to comply with these requirements.
- B. Information concerning underground utilities and service lines may be obtained from the utility companies, Owner and the FAA. The Owner does not guarantee their accuracy of information provided regarding existing conditions and utilities. The Contractor is advised to determine the exact locations from the available sources of information, or provide his own means of detection.
- C. Contractor shall notify Airport personnel, Airport Tenants, utility companies, FAA personnel, and local utility agencies personnel before excavating in any area.
- D. Agencies / utility companies with service on the Airport are listed in Subsection 70-15 of the General Provisions.
- E. In all construction areas, all FAA cables shall be marked by the Contractor prior to construction. Contractor is to protect cables during construction. Contractor shall notify FAA supervisor in advance of construction activity to avoid unscheduled facility outages. Any FAA equipment/cable that is damaged by the Contractor shall be repaired as approved by the FAA supervisor / representative. All cable splice/repairs shall meet FAA specifications and be accomplished to the satisfaction of the FAA representative. Qualified workmen regularly engaged in that type of work shall perform all cable work. If an existing cable cannot be repaired to the satisfaction of the FAA, new cable of like kind shall be installed.
- F. Maintain existing surface and pipe storm drainage, unless otherwise noted.

3.3 USE OF SITE

- A. The Contractor shall at all times conduct his work so as to create no hindrance, hazard, or obstacle to vehicular or aircraft traffic using the Airport.
- B. The Contractor shall control his or her operations and the operations of his or her subcontractors and all suppliers so as to provide for the free and unobstructed movement of aircraft in the aircraft operations areas of the airport. This area shall be accessible to the Contractor on a limited basis.
- C. Aircraft always have right of way in operating areas.
- D. Access to the work: access to the work will be via the access routes shown on the plans or as directed by the Owner. The Contractor shall identify access routes with suitable signs, barricades and similar equipments.
- E. All construction traffic shall enter and exit the project area through access points directed by the Owner. Contractor will be responsible for security of construction access gates in accordance with the airport's security plan.
- F. Haul Route: All existing roads and parking lot areas that will be used as part of the haul road will be restored to their original condition. After completion of the project the Contractor will be responsible for daily clean up operations of debris that may be on the haul road.
- G. The existing airport pavements, access roads, and haul routes may not be capable of supporting certain types of construction equipment. Prior to bidding, the Contractor shall fully satisfy himself as to the ability of the existing airport pavements to satisfactorily sustain the type of equipment he plans to use. Contractor shall size the equipment used for construction accordingly. The Contractor at no additional cost to the Owner shall repair any damage caused by hauling or any other construction activity to existing pavement.
- H. It is of specific importance that all aircraft operating areas, parking lots, and landscaped areas be kept free of construction related debris due to potential aircraft damage. The Contractor shall police the construction and adjacent site area regularly to assure that no debris creates an endangerment to aircraft. Contractor shall maintain these pavements clean throughout the project.
- I. Project access, staging area, waste area, stockpile area and all haul roads shall be restored to original condition including topsoil and seeding at job completion at no additional cost to owner.
- J. The location (and size) of the Contractor's staging area will be determined at the pre-construction conference.
- K. All construction material and equipment shall be located and stored in the designated staging area(s) only.
- L. The Contractor will be responsible for the cleanup and disposal of all trash and debris created by his work or personnel within the Project Work Area and adjoining Public Areas. All trash and debris must be disposed of offsite.

- M. The Contractor will be responsible for the storage and security of his material and equipment and shall erect storage facilities and fencing as necessary. The Contractor's storage and staging area shall be in the general location(s) shown on drawing.
- N. Contractor shall control dust at an acceptable level. The Contractor shall be required to keep a water supply at the project site during heavy equipment usage areas.
- O. Burning of debris will not be allowed on the Airport property.
- P. All vehicles operated on existing pavements to remain shall be rubber tired.
- Q. The Contractor shall not enter or encroach upon an aircraft parking area or operational taxiway without first obtaining permission from the Owner or FAA.
- R. Damage to aircraft, ground equipment, or facilities on the ground, resulting from hauling or storage of material or other activities in connection with the execution of the contract work, shall be repaired or replaced by the Contractor in as good or better condition as originally found.
- S. Stock-piled material shall be constrained in a manner to prevent movement resulting from aircraft engine blast or wind.
- T. All vehicles of the Contractor's forces shall be parked in designated areas only. Contractor to provide temporary gate and fencing at perimeter and is to be responsible for security, maintenance, and restoration of areas.
- U. In the event the Contractor services his equipment on Airport property, all oil and fluids removed from the equipment must be collected and disposed of in accordance with the local, state and federal environmental laws. If a hazardous, or regulated material is spilled, it must be promptly reported to the airport and cleaned up by the Contractor at Contractor's expense.
- V. Temporary fencing and vehicle barricades shall not be secured to the pavement and these items shall be self-supporting without the need to core the pavements or the use of anchor bolts.

3.4 PHASING AND SEQUENCING

- A. Existing easements to other properties shall be maintained at all times. Areas outside the project limits are designated as restricted areas. The Contractor's forces are prohibited from entering restricted areas at any time, unless specifically authorized by the Airport operations department.
- B. The Contractor shall be responsible for visiting the site to become familiar with the existing conditions. The Design Documents shall serve to aid the Contractor in the evaluation of the sequences and extents of construction; but shall not be held to be all-inclusive. Any conflicts or apparent deficiencies must be submitted in writing prior submission of the RFP response.
- C. Portions of the Airport shall be occupied during construction. The Contractor shall comply with the following life safety issues. Failure to list all life safety issues does not

relieve the Contractor from complying with federal, state and local codes, the contractual agreement between the Contractor and Owner, and other governing bodies which have jurisdiction on this project. The following are interim life safety code issues which are specific to this project and must be addressed:

- 1) Insure all tenant facilities, fire hydrant access, building entrances and exits provide free and unobstructed ingress and egress.
 - 2) Insure access to AOA areas are secured at all times.
- D. Smoking shall only be allowed in designated areas outside of the buildings.
- E. Develop and enforce storage, housekeeping and debris removal procedures that reduce the flammable and combustible fire load to the lowest level necessary for daily operations.
- F. Secure all tools and construction materials during breaks and non-construction hours.

END OF SECTION 01140

**SECTION 01143
AIRPORT PROJECT WORK PROCEDURES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 50, "Control of Work"
 - 2) Section 00 72 00, "General Conditions"
 - 3) General Provision Section 80, "Execution and Progress"
 - 4) Section 01100, "Summary"
 - 5) Section 01140, "Work Restrictions".
 - 6) Section 01320, "Construction Progress Documentation"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 INTRODUCTION – AIRPORT OPERATIONS

- A. The safety of the Airport patrons and personnel and of the Contractor's personnel is paramount throughout construction. Except where stricter requirements are indicated, the Contractor shall follow the safety guidelines outlined in the CSPP.
- B. This project may include Contractor operations within active Air Operations Areas (AOA), which is demarcated by the airfield security fencing. The Airport will conduct normal aircraft operations during the course of this project, subject to certain restrictions called out in this section or elsewhere in the specifications. Therefore, to provide for the security and safety of Airport users and the Contractor's forces, as well as to minimize interruptions to aircraft operations, the Contractor shall limit his work within the areas designated and conduct his operations as specified.
- C. Unauthorized crossing of the AOA is prohibited.
 - 1) Any fines or assessments levied against the Sponsor (Owner) as a result of intrusions in the AOA or other violations by the Contractor's personnel or those of his subcontractors and suppliers will be passed on to the Contractor and assessed against the Contract Amount on the next Application for Payment.
 - 2) In addition to any fines assessed to the individual and the Sponsor, the Contractor will be subject to a fine per incident, assessed by the Sponsor.
 - a. For the first incident, the individual and firm will be fined \$2,500.
 - b. For the second incident, the individual and firm will be fined \$5,000.
 - c. For the third incident, the individual, and possibly the associated firm, may be prohibited from the Secured Area, from the Work area, or from the Airport property, at the sole discretion of the Airport.

- D. Construction Scheduling and Coordination: The Work will be conducted so as to provide the least possible interference with the Owner's, tenants, and FAA daily operations. Prior to commencing Work on-site, the Contractor shall submit, and secure approval from the Owner, a complete schedule for the project, identifying any expected periods of potential conflict.
- E. Coordinate Construction Activities with Airport Operations and Security Plan:
 - 1) Provide and/or secure the following:
 - a. Safety Plan Report
 - b. Quality Assurance Plan Report
 - c. Security badges/training (Where AOA access is required)
 - 2) Reports under this heading shall be prepared in compliance with Airport Operations Department requirements.
- F. Contractor may contact Airport Operations OR Designated Representative for requirements and clarifications related to this topic.

1.3 AIRPORT SAFETY

- A. Contractor shall obtain, have knowledge of, and incorporate the following safety provisions into the construction project:
 - 1) Operational Safety on Airports During Construction – AC-150/5370-2G, latest edition, (attached as Appendix A).
 - 2) Airport Safety Self-Inspection – AC-150/5200-18C, latest edition.
 - 3) Painting, Marking, and Lighting of Vehicles Used on an Airport – AC 150/5210-5D, latest edition.
 - 4) Consideration of Improvement of Airport Safety – FAR, PART 139.
- B. Contractor shall comply with all Airport rules and regulations and security requirements that may be established to protect airport operations.
 - 1) Additional notes on the Drawings and in the general requirements sections of these Documents provide a level of safety and security requirements and guidelines.
 - 2) The Contractor shall incorporate the CSPP and Airport guidelines and requirements into his Safety Plan Compliance Document (SPCD), and attain Owner's approval in advance of mobilizing Contractor's forces on the Airport premises.
 - 3) Failure to comply with the SPCD, or violation of any Airport safety and security regulations and protocols, will result in disciplinary action. At a minimum, violations will result in temporary restriction of an individual's access to secure areas of the Airport. Disciplinary actions may, as relates to the type and nature of the violation, and is at the Airport's sole discretion, disciplinary actions may include:
 - a. Verbal reprimand and temporary revocation of access privileges
 - b. Temporary revocation of access privileges and mandatory re-training in Security Class and Airport Safety and Security procedures
 - c. Permanent restriction of access privileges
 - d. Permanent loss of access privileges

- e. Restriction from worksite
 - f. Restriction and removal from Airport property(ies)
 - g. Fines, as defined elsewhere in this document or in the security plan
- C. All actions of the Contractor's employees, subcontractors and suppliers are the sole responsibility of the Contractor. All employees, subcontractors and suppliers must be educated regarding related work and the safety requirements of the aircraft operations area and public safety adjacent to the construction area.
- D. Observe and/or follow all safety related instructions by any Federal Aviation Administration (FAA), Transportation Security Administration, and Airport personnel at all times.
- 1) In case of emergency, the Contractor shall make every effort to remove the equipment and personnel from affected area(s) and abide by decisions made by the Owner or his/her representative.
 - a. To the best of his ability, the Contractor shall immediately comply with directives from representatives of the FAA and Transportation Security Administration. Contractor will then promptly notify first the designated Airport Operations representative and second the Owner's project representative of the incident.
 - b. See General Conditions and other parts of this Section for additional information in case of emergencies and other unforeseeable conditions beyond the Control of the Contractor or the Owner, which may include acts of God or the public enemy, acts of government, hurricanes, fires, floods, or safety and security incidences and changes in national transportation safety and security procedures.
- E. The Contractor shall cooperate with the Airport users and tenants, through the Owner, in scheduling of all work operations.
- F. Vehicular Markings: Contractor vehicles and equipment shall be marked with checkered flags and lighted with flashing beacons to comply with requirements of FAA AC 150/5210-5D, latest edition, when operated within the airfield or SIDA.
- G. Obstructions to Navigation:
- 1) Violation of Safety Zone Surfaces: Penetration of equipment, vehicles, materials, or men into the safety zones and approach surfaces requires the preparation and distribution of Notices of Airmen (NOTAMs) in advance to the actual penetration.
 - 2) Scheduling: When part of the work in this project is in violation of FAR Part 77, the clearance distance requirements from runway and taxiway edges shall be incorporated into the construction sequence schedule. At no time shall the construction limits of the area under construction violate the safety zones without prior notification to and approval by the Engineer.
- H. Coordination and Communication: Work within and adjacent to active AOA's shall be coordinated with the Owner prior to commencement of the activity. Work crews in these areas shall be accompanied by the construction superintendent who shall be in constant radio contact with ATC.

- I. Safety and security can be discussed with the Contractor or the Contractor's safety representative at the Pre-Construction Conference and at progress meetings at the job site.

1.4 AIRPORT SECURITY

- A. Secured Area Requirements: As part of the Airport Security Plan, the Contractor will be required to adhere to all FAA and TSA security requirements and all construction personnel working in, or having access to, secure areas (AOA) will be required to obtain and wear badges issued by the Owner and comply with provisions of the Airport Security Plan and Airport Rules and Regulations:
 - 1) Badges will be required for most construction personnel. The Contractor's superintendent and supervisors, all approved equipment escort personnel, and other select personnel shall be trained, certified and badged for operations within the Secured Area as defined with the current approved Airport Security Plan.
 - 2) Obtain necessary clearances and identification badges for construction personnel through the Airport Operations Department (See Special Conditions, "Airport Security Provisions"). The badges shall be returned at project completion.
 - 3) Applications for clearance check and other required forms should be turned into Airport Operations. A photo identification badge will be issued for each approved application.
 - a. The badge remains property of the Owner. There is no charge for the initial badge itself.
 - b. A non-refundable fee of Seventy-Five Dollars (\$75.00) fee will be assessed if a badge holder loses the badge or does not return the badge at the completion of the project, or upon request of Airport Operations, or if a badge holder fails to report a lost badge in a timely manner.
 - 4) Each badge holder will be required to comply with the security rules and regulations of the Jonesboro Municipal Airport.
 - a. The Airport could suffer severe fines or penalties as a result of security violations.
 - b. The Contractor will be responsible for these fines or penalties for any security violations that are his responsibility.
 - c. In addition to fines assessed by the Federal Regulatory Agencies for security violations, the Contractor, and the responsible individual, will be assessed a fine for each violation, as described elsewhere in this Section.
- B. The Contractor shall provide security within the construction area and shall keep all unauthorized personnel out.
- C. Contractor should confine all construction personnel to within the construction limits during each phase of the work.
- D. Contractor security measures will be discussed and reviewed at the Pre-Construction Conference.

1.5 CONSTRUCTION SAFETY REQUIREMENTS:

- A. General Safety and Accident Prevention: The Contractor shall comply with all applicable federal, state, and local laws, ordinances, and regulations governing safety, health, and sanitation; shall provide barricades; and shall take any other needed actions, on the Contractor's own responsibility, that are reasonably necessary to protect the life and health of employees on the job, the safety of airport users, and the safety of moving and parked aircraft, and other property during the performance of the work.
 - 1) Safety Officer: The Contractor is required to designate a Safety Officer who will be the liaison between the Contractor and the Owner in all safety related matters for the duration of the project. The Safety Officer shall be on call 24 hours per day for emergency maintenance of airport hazard lighting, barricades, and other safety features.
 - a. The Safety Officer's duties shall include accident prevention.
- B. Portions of the Airport shall be occupied during construction. The Contractor shall comply with the following life safety issues. Failure to list all life safety issues does not relieve the Contractor from complying with federal, state and local codes, the contractual agreement between the Contractor and Owner, and other governing bodies which have jurisdiction on this project. The following are interim life safety code issues which are specific to this project and must be addressed:
 - 1) Insure all tenant facilities, fire hydrant access, building entrances and exits provide free and unobstructed ingress and egress.
 - 2) Insure access to AOA areas are secured at all times.
- C. Smoking shall only be allowed in designated areas outside of the buildings.
- D. Develop and enforce storage, housekeeping and debris removal procedures that reduce the flammable and combustible fire load to the lowest level necessary for daily operations.
- E. Protection of Utilities: The Contractor shall be responsible for field marking and protecting all utilities within the construction limits.
- F. Storage of Equipment, Vehicles, and Materials: All equipment, vehicles, and materials must be stored in the designated storage or staging area or in areas acceptable to the Airport during breaks and non-construction hours.
- G. Limitations on Construction Methods:
 - 1) No open flames or burning will be allowed on Airport property. Burning of debris will not be allowed on airport property
 - 2) Stockpiled material shall be constrained in a manner to prevent displacement by jet blast, propeller blast, or wind.
- H. Prior to commencing the work, Contractor shall obtain all necessary permits and approvals, including building construction permits, required for the project.

- I. Contractor to submit a SPCD for approval within ten days of receipt of the Notice to Proceed, but in no case later than the Pre-Construction Conference.

1.6 PHASING AND SEQUENCING

- A. The Contractor shall schedule all work activities in accordance with requirements of the Owner approved work sequence and phasing prepared by the Contractor and these Specifications unless otherwise approved by the Owner.
- B. Existing easements to other properties shall be maintained at all times. Areas outside the project limits are designated as restricted areas. The Contractor's forces are prohibited from entering restricted areas at any time, unless specifically authorized by the Airport.
 - 1) Construction stakeout shall be performed by Contractor in accordance with Subsection 50-07 of the General Provisions. It shall be the responsibility of the Contractor to provide all measurements that may be required to lay out the construction.
- C. Contractor shall be responsible for visiting the site to become familiar with the existing conditions. The Design Documents shall serve to aid the Contractor in his evaluation of the sequences and extents of construction; but shall not be held to be all-inclusive. Any apparent conflicts or deficiencies must be submitted in writing, prior to Submission of the RFQ Response.

1.7 USE OF PREMISES

- A. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1) Limits: Confine construction operations to staging areas, and areas identified for each phase of construction elsewhere in the Construction Documents.
 - a. Restricted Areas: Secure Identification Display Areas, Secured Area, and Aircraft Operations Area:
 - 1) Access to some areas of the Project Work Area is restricted to cleared personnel. Contractor shall be responsible for the performance of the Contractor's own forces, of all subcontractors and subcontractors' forces, and suppliers.
 - 2) Contractor is responsible for making all Contractor and subcontractor or other construction related forces on site aware of the Airport Security Program as it relates to access to the Airport Operations Area.
 - 3) Perform work in a manner so as to limit construction activities in restricted areas of the Airport. Contractor's approved Superintendent shall be present for any construction activity that is expected to occur in the Secured Area.
 - 2) The Owner will endeavor to cooperate with the Contractor's operations when the Contractor has notified Airport Operations or designated representative in advance of need for changes in operations in order to accommodate construction operations. Conduct the work so as to cause the least interference with the Owner's and tenant's/FAA tower operations.

- 3) Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, tenants, patrons, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
 - c. Delivery vehicles, construction vehicles and other construction related hauling vehicles are restricted to the hauling/travel routes shall be identified on the Contractor's layout Plan approved by the Airport, unless otherwise authorized, in writing, by the Airport or designated representative.
 - d. The area immediately adjacent to the Area of Work is limited. Coordinate transportation of workers and equipment from the Staging Area to this area in order to limit the number of vehicles present. Limit total number of vehicles in this area to the space available, and as approved in advance by Airport Operations or designated representative. Only authorized work vehicles, as described elsewhere in this document, will be allowed access to the Secured Area. No personal vehicles will be allowed in the staging areas within the Secured Area.
 - e. Storage areas will be available on site.
 - 4) Signs: Provide signs adequate to direct visitors, tenants, and airport patrons. Do not install, or allow to be installed, signs other than specified sign(s) and signs identifying the principal entities involved in the project.
- B. Emergency Preparedness / Special Event Conditions: The Contractor shall fully participate with the City of Jonesboro in reasonable measures to protect the general public, the City of Jonesboro and the Airport, their employees, the Contractor and his employees, and his forces, equipment, and materials from damages from unforeseeable causes beyond the control of the Owner or the Contractor, including but not limited to: unusual weather events, acts of God, acts of public enemies, acts of government, fires, floods, discovery of pre-existing hazardous materials or hazardous conditions, epidemics, quarantine or public-health regulations, and strikes or lockouts.
- 1) In the event of an emergency affecting the safety or security of the public, Airport tenants, Airport employees, Contractor or subcontractor employees, the Project, other property or individuals, then the Contractor, without special instruction or authorization, shall act to prevent and reduce injury, damage, or loss.
 - a. Upon observation of conditions, acts or events indicating risk to safety or security anywhere on Airport property, Contractor shall immediately notify Airport Operations, RPR and/or designated representative.
 - 2) The Contractor and representatives of primary subcontractors, to include at a minimum the Superintendent, Safety Coordinator, and Security Coordinator, shall attend and take part in emergency preparedness planning meetings organized by the Airport.
 - 3) In the event of foreseeable (at least 24-hours advance warning) uncontrollable conditions that may impact the Airport (e.g., approaching hurricane), the Contractor is responsible for securing the Project Area to reduce risk of damage to persons or

- property, to the satisfaction of the Owner. Upon notice from Airport Operations or designated representative or other authority having jurisdiction of impending hazardous conditions, the Contractor shall:
- a. Enclose any in-progress openings in the building envelope with weather-proof temporary partitions.
 - b. Cover exposed substrates or incomplete exterior finishes securely with anchored water-resistant coverings.
 - c. Secure unused materials in containers and/or trailers and remove from areas in, on, or adjacent to construction or existing buildings.
 - d. Remove all equipment or materials that are likely to become air- or water-borne, to include staging materials and temporary facilities, from, on or adjacent to the AOA.
 - e. Remove cranes, hoists, and other mobile equipment over ten feet tall from the site, or to covered storage, if allowed by Airport Operations or designated representative.
 - f. Remove all non-essential vehicles from the Site, and secure off-site under Contractor's care and control.
 - g. When practical, completely demobilize any staging areas on the Airside (AOA) of permanent fences and relocate to other staging areas on the non-secure side of the security fence.
 - h. When practical, remove equipment and materials to secured storage off-site, approved per other parts of these specifications.
 - i. Cover, secure, and anchor any equipment and materials in the non-secure staging area that cannot practically be relocated to secured storage off-site.
 - j. Secure the Work and Site as is most practicable, and in the best interests of the public, the Project, the Owner, and Contractor.
 - k. Provide Airport Operations or designated representative with emergency contact information for key personnel.
 - l. Evacuate non-essential personnel to safer locations.
- 4) Contractor is fully responsible for the safety and security of the Project throughout Construction. In any special event, should the Contractor fail to remove forces, equipment, and materials under his control from the Owner property, or to secure the same and the Work to the satisfaction of Airport Operations or designated representative, and in the opinion of Airport Operations or designated representative those forces equipment, or materials shall be at risk of injury, damage or loss, or of causing injury, damage, or loss to the Owner or others; then the Owner may, or may not, choose to remove, relocate, or secure the Work by whatever means the Owner deems in the best interest of the Owner and the Project.
- a. The Contractor agrees in a special event that he has abandoned any property not secured to the satisfaction of Airport Operations, RPR or designated representative.
 - b. Should the Owner be required to secure items under the control of the Contractor, the Contractor shall reimburse the Owner for actual costs incurred in securing the Work, to include, but not limited to, labor, oversight, use of equipment, rental of equipment, cost of fuels, storage fees, material, utilities, and incidentals.

- c. The Owner assumes no responsibility for damage or loss of Contractor property, equipment, materials or parts of the Work not secured by the Contractor, or necessitated to be secured or relocated in the interests of public safety or security.
- C. Cleanliness of Site: Contractor shall be responsible for keeping aircraft operations areas, movement areas, ground service routes, work open to or visible from public areas, tenant operations areas, work areas used or accessed by others, haul route, parking lots, landscaped areas/grounds, and staging areas in an orderly and clean condition.
 - 1) Areas on or adjacent to aircraft operations shall be kept clean and free of loose debris that may pose a hindrance to airport operations. Contractor shall police area on a regular basis, provide adequate containers for anticipated debris, and remove loose debris and containers to storage away from aircraft operations area and security fence on a more-than-daily basis. Further requirements are noted elsewhere in the contract documents, the drawings and project manual.
 - 2) The Contractor shall clean up construction debris on a regular basis and as directed by the Owner. Debris and materials scheduled for recycling shall be secured or removed from the building site.

1.8 OCCUPANCY REQUIREMENTS

- A. Owner Occupancy: Allow for Owner occupancy of the site and use by the public.
- B. Full Owner Occupancy: Owner will occupy site during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations.
- C. Partial Owner Occupancy: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.
 - 1) Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work that may be occupied before Owner occupancy.
 - 2) Obtain a Certificate of Occupancy from Authorities Having Jurisdiction before Owner occupancy.
 - 3) Before partial Owner occupancy, life safety, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will provide, operate, and maintain mechanical and electrical systems serving occupied portions of building.
 - 4) On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of building.

1.9 COORDINATION WITH DAILY OPERATIONS

- A. Occupied areas include all areas in which the Owner's regular operations will be going on or to which the Owner or the Airport's tenants requires access during the construction period, whether conducted by the Owner or his tenants, clientele, or the public.

- B. On-Site Work Hours: **Construction related activities, in general, shall proceed during normal working hours, unless the work will interfere with operating procedures of the Airport. When this interference occurs, the Contractor shall arrange the required activities and work schedule to be performed during non-operating hours of the area of the Airport affected.** Some areas of the Airport are in operation for fewer hours each day than the overall operating hours, and the Contractor shall have the option of working those areas which are not in operation when the construction activities cause neither interference nor safety or security problems to the users of the Airport. Contractor may, upon approval of the Owner, choose to conduct construction activities during off hours. Work in public areas, and work impacting airport or tenant operations areas and utility connections, shall be coordinated with the Airport and respective tenants not less than thirty (30) calendar days in advance of anticipated work in those areas. Provide an updated schedule seven (7) days in advance of anticipated work in the above-noted areas.
- 1) Normal Operating Hours: The existing facilities generally in operation between the hours of 7:00 am and 8:00 p.m., seven days per week. Precise work hours shall be coordinated with Airport at Pre-Construction Conference, and may be adjusted, if needed, at monthly meetings thereafter.
 - 2) Off-Hours: Off hours are generally defined between as being between 8:00 p.m. and 7:00 am in most areas.
 - a. Contractor shall limit and restrict Work during off-hours. Contractor shall coordinate with Airport not less than fifteen days in advance of performing any off-hours work and shall be responsible for reimbursing the Owner for additional costs incurred to provide staff during non-normal hours.
- C. Coordination with Aircraft Operations: Contractor shall coordinate all construction activities and work to minimize impacts to the Airport, and tenant operations.
- D. When the following must be modified, provide alternate facilities acceptable to Airport Operations or designated representative:
- 1) Entrances and driveways which must remain open.
 - 2) Utilities which must remain in operation.
 - 3) Informational signage to direct airport users and patrons.
- E. Scheduling: Contractor shall review and coordinate the Construction Schedule with RPR.
- 1) Submit a comprehensive preliminary construction schedule for review fourteen (14) calendar days in advance of the Pre-Construction Conference. Refer to other sections of the General Provisions and these general requirements for additional information.
 - 2) Changes to the approved construction schedule will not be allowed unless approved by Airport Operations or designated representative in writing. A construction schedule with project sequencing and coordination timetables for construction adjacent to or within aircraft operation areas must be approved before any work commences.
 - 3) Changes to Security Operations: Notify Airport Operations in writing at least fourteen calendar days in advance of any proposed changes affecting the Secured Area, including any changes to the security fence, any gates opening to the Secured Area, access control devices at gates on the line of demarcation, modifications to staging areas in the Secured Area, modifications to Security Operations such as using a guard at a gate rather than existing access control. Proposed changes, including temporary

changes, to the Airport Security Plan must be approved and filed with the authorizing agencies not less than thirty days prior to the change taking affect. Contractor shall be liable for any delays in prosecuting the Contractor's work resulting from failure to provide sufficient notice.

- 4) Notify Airport Operations at least seven (7) days in advance of any proposed changes to the construction schedule for approval.
- 5) Notify Airport Operations at least ten (10) calendar days in advance of mobilizing to the project staging area.
- 6) Notify Airport Operations at least thirty (30) days in advance of any demolition activities and coordinate the relocation of any Airport tenants within the existing facilities.
- 7) At times and days to be determined at the Pre-Construction Conference, bi-monthly meetings shall be held involving the Contractor's superintendent, the Architect/Engineer and Airport Operations or designated representative; weekly meetings may be held involving the construction superintendent and the Owner's designated representative.
- 8) The Contractor shall be responsible for informing in writing the Airport of the construction schedule for the approaching two weeks' construction activity.
- 9) All subcontractors shall supply the above information to the Contractor for inclusion in their report. Any storage of materials, access or egress problems, traffic flow or normal airport operations which are to be affected must be protected and/or agreed upon by Airport Operations or designated representative. All costs shall be incurred by the Contractor.

1.10 UTILITIES

- A. Utilities are located adjacent to and within the construction area. Contractor shall coordinate with the Engineer and the Airport to identify utilities. Contractor shall be responsible for contacting utility owners and locating all existing utilities within the work area. Contractor shall be responsible for costs associated with utility location, protection, and for required repairs due to failure to comply with these requirements.
- B. Information concerning underground utilities and service lines may be obtained from the utility companies, Owner, and the FAA. The Owner does not guarantee the accuracy of any information provided regarding existing conditions and utilities. The Contractor is advised to determine the exact locations from the available sources of information or provide his own means of detection.
 - 1) Agencies / utility companies with service on the Airport are identified in subsection 70-15 of the General Provisions.
- C. Contractor shall notify Airport personnel, utility companies, and FAA personnel, before excavating in any area.
- D. In all construction areas, all FAA cables shall be marked by the Contractor prior to construction. Contractor is to protect cables during construction. Contractor shall notify FAA supervisor in advance of construction activity to avoid unscheduled facility outages. Any FAA equipment/cable that is damaged by the Contractor shall be repaired as approved by the FAA supervisor / representative. All cable splice/repairs shall meet FAA specifications and be accomplished to the satisfaction of the FAA representative. Qualified workmen regularly engaged in that type of work shall perform all cable work. If an existing

cable cannot be repaired to the satisfaction of the FAA, new cable of like kind shall be installed.

- E. Maintain existing surface and pipe storm drainage, unless otherwise noted.

PART 2 - PRODUCTS

2.1 BARRICADES

- A. Barricades shall be constructed and installed as described in other sections of the specifications and as shown on the drawings, and in accordance with the CSPP.
- B. Maintain barricades throughout construction.
 - 1) Inspect barricades in place at least twice daily to ensure correct placement and functional flags and light.
 - 2) Immediately correct any damage or disrepair, or replace barricade.
- C. Furnish and maintain all barricades lights.
 - 1) Supply all batteries and lamps for barricade lights necessary for Project.
- D. Remove and relocate barricades as directed by Airport Operations or designated representative during construction in accordance with referenced guidelines.

PART 3 - EXECUTION

3.1 COORDINATION

- A. The Contractor shall have a general supervisor on the job at all times during construction activity.
- B. The Owner will designate a representative who will issue all Notices to Airmen (NOTAMs) with the Federal Aviation Administration.
- C. The Contractor shall furnish the Owner with the necessary information on construction conditions (apron closure, tie-ins to existing movement areas, etc.) so that the Airport can advise flight control to issue NOTAMs in accordance with established criteria.
- D. The Contractor shall make reasonable effort to coordinate with separate Contractors working in the same area or adjacent areas. Specific overlap areas are noted elsewhere in the contract documents, the drawings and project manual.

3.2 CONTRACTOR OPERATIONS ON SITE

- A. The Contractor shall at all times conduct the Contractor's work so as to create no hindrance, hazard, or obstacle to vehicular or aircraft traffic using the airport.
 - 1) The Contractor shall control his operations and the operations of his subcontractors and all suppliers so as to provide for the free and unobstructed movement of aircraft in the aircraft operations areas of the airport. This area shall be accessible to the Contractor on a limited basis.
 - 2) Aircraft always have right of way in operating areas.
 - 3) The Contractor shall not enter or encroach upon an aircraft parking area or operational taxiway without first obtaining permission from the Owner or FAA, as allowed under the Security Plan.
- B. Damage to aircraft, ground equipment, or facilities resulting from hauling or storage of material or other activities in connection with the execution of the contract work, shall be repaired or replaced by the Contractor in as good or better condition as originally found.
- C. All construction traffic shall enter and exit the project area through the Airport approved access points, as shown on the Contractor's phasing and work sequence drawings approved and as directed by Airport Operations or representative. Access to the work: will be via the access routes shown on the plans or as directed by Airport Operations or designated representative.
 - 1) The Contractor shall identify access routes with suitable signs, barricades and similar equipment.
 - 2) Contractor will be responsible for security of construction access gates in accordance with the Airport Security Plan.
 - 3) Contractor to provide temporary gate and fencing at perimeter of project areas as needed, and is to be responsible for security, maintenance, and restoration of areas.
 - 4) Gates to the AOA or Security Identification Display Areas (SIDA) must be locked at all times or manned at all times by badged employees of the Contractor.
- D. Use of Contractor Vehicles on airport property:
 - 1) Contractor's vehicles used on the Airside portion of the premises must be clearly marked.
 - 2) All vehicles operated on existing pavements to remain shall be rubber tired.
 - 3) All vehicles of the Contractor's forces shall be parked in designated areas only.
 - 4) In the event the Contractor must service his equipment on airport property, all oil and fluids removed from the equipment must be collected and disposed of in accordance with local, state and federal environmental laws. If a hazardous or regulated material is spilled, it must be cleaned up by the Contractor and promptly reported to the Airport.
- E. Haul Route: Existing roads used as part of the haul road shall be restored to their original condition after completion of the project, unless noted otherwise. The Contractor will be responsible for daily clean up operations of debris that may be on the haul road.
 - 1) The existing airport pavements, access roads, and haul routes may not be capable of supporting certain types of construction equipment. Prior to submission of the RFQ response, the Contractor shall fully satisfy himself as to the ability of the existing airport

- pavements to satisfactorily sustain the type of equipment he plans to use. Contractor shall size the equipment used for construction accordingly. As part of the Work, the Contractor shall repair any damage caused by hauling or any other construction activity to existing pavement.
- 2) It is of specific importance that all aircraft operating areas be kept free of debris due to potential aircraft damage. The Contractor shall police the construction and adjacent site area regularly to assure that no debris creates an endangerment to aircraft. Contractor shall maintain these pavements clean throughout the project.
 - 3) Except where designated on plans or as authorized by Airport Operations or designated representative, Contractor will not be allowed to use any of the existing runways, taxiways, or apron as part of the haul road.
 - 4) The Contractor shall restore any project access route, staging area, waste area, stockpile area and all haul roads to the original condition, including topsoil and seeding, at job completion.
- F. The Contractor's staging area has been preliminarily shown on the drawings for information purposes only. The actual size and location will be determined at the Pre-Construction Conference.
- 1) All construction material and equipment shall be located and stored in the designated staging area(s) only.
 - 2) The Contractor will be responsible for the daily cleanup and regular disposal of trash and debris created by his work or personnel. Trash and debris must be disposed of offsite.
 - 3) The Contractor will be responsible for the storage and security of his material and equipment and shall erect storage facilities and fencing as necessary. The Contractor's storage and staging area shall be in the general location(s) shown on the site plan drawing within the Design Documents.
- G. Contractor shall control dust at an acceptable level. The Contractor may be required to keep a water supply at the project site during heavy equipment usage areas.
- H. Stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft engine blast or wind.

3.3 COMMUNICATIONS AND CONTROLS

- A. Contractor shall maintain communication with Airport Operations at all times during construction activity or access in the Aircraft Operations Area (AOA).
- 1) All access to or through Aircraft Movement Areas shall be by appropriate badged escorting individuals and shall be coordinated in advance with Airport Operations, Airport Operations or designated representative. Vehicles in the Movement Areas shall maintain open communication with the Superintendent and Airport Operations.
 - 2) Approaching, intruding upon, or crossing the taxiways and runways is strictly prohibited.
- B. Contractor shall protect existing runway and taxiway lights, signs, and NAVAIDS.

- 1) Any unplanned, unapproved, or accidental shutdown or interruption of service to any lighting circuit or navigational aid requires immediate notification to Airport Operations and shall be repaired immediately by the Contractor. The cost of materials and labor required to repair the lighting circuit shall be borne by the Contractor.
- C. Safety Devices and Barricades: Existing aprons, roadways and parking lots, taxiways and runways outside the limits of construction shall be separated from construction areas with barricades as shown on the Contractor's phasing and work sequence drawings and as directed by Airport Operations or designated representative.
- 1) Place all barricades and temporary markings at locations as directed by Airport Operations or designated representative. Exact locations will vary depending on aircraft operations, construction schedule and construction operations.
 - 2) Mark and light all open trenches in accordance with FAA AC 150/5270-2, latest edition.
 - 3) Contractors shall locate and maintain all airfield safety devices. Contractor should provide for daily check of required lights and replacement of batteries to ensure correct operations.
- D. When the Contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish, erect and maintain barricades, warning signs, flagmen, and other traffic control devices in reasonable conformity with the *Manual of Uniform Traffic Control Devices* for streets and highways unless otherwise specified herein.
- E. If the Contractor is given approval to work at night, temporary lighting shall be provided by the Contractor at the work site. Type, direction, number and location of lights shall be submitted not less than ten days in advance for review and approval by Airport Operations or designated representative. Where lighting affects the aircraft apron, it shall be accomplished in a manner to create no hindrance to aircraft, aircraft operations, or the aircraft control tower. Upon notification of any conflict, contractor shall adjust lighting in the field as directed by Airport Operations or designated representative or the Engineer/Architect.
- F. Appropriately mark or light all equipment to be operated on the airside area in accordance with FAA AC 150/5210-5D, latest edition. Maximum height of equipment shall be 35 feet depending on the location within Contractor's work limits shown on safety and sequencing plans unless approved by the FAA, and Airport Operations or designated representative. Use of any equipment exceeding this height at any time, will only be during daylight VFR conditions.
- G. All vehicles used on the airfield shall meet airport requirements for marking and lighting all equipment. Vehicles shall be marked with rotating yellow beacons or 3 by 3 orange and white flags (if daylight operation only) in accordance with FAA AC 150/5210-5D, latest edition, in addition to company logos and markings identifying each piece of equipment. Advisory Circular may be obtained from the FAA (www.faa.gov).

3.4 SECURITY GATES AND FENCING:

- A. Responsibility for Security: The Contractor has the responsibility for maintaining control of the access gates or any other entrance to the AOA within the project work area.
- 1) The Contractor's method of maintaining security shall be set forth in the Contractor's Security Plan. Deviations or variations from the Contractor's Security Plan must be approved by the Owner, in advance, in writing.
 - 2) Any change, including temporary changes, in operation of existing gates or doors requires advance coordination with Airport Operations or designated representative.
 - 3) The Contractor shall maintain existing gates and access routes in current operation, unless specifically noted otherwise in other parts of the contract documents, drawings, and specifications; or as authorized in writing by Airport Operations or designated representative.
 - 4) The Contractor may utilize a gate guard or install an automatic operated gate controller with limited access with numeric keypad. The Contractor may also use an interlocking pad lock, and the Airport will be provided with a key.

END OF SECTION 01143

**SECTION 01150
MEASUREMENT AND PAYMENT**

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. Method of Measurement and Payment: This section supplements Section 90 of the General Provisions and establishes the method of measurement and payment for work performed under this contract.
- B. Unit Price: Except where lump sum is indicated, payment for work performed shall be made on a unit price basis in accordance with the accepted bid and the method of payment provided in the General Provisions.
- C. Related Requirements in Other Parts of the Specifications:
 - 1. Bid (Proposal)
 - 2. Agreement.
 - 3. Conditions of the Contract.
- D. Related Requirements Specified in Other Sections:
 - 1. Contracting Forms and Supplements – Section 00 50 00.
 - 2. Summary of Work - Section 01010.
 - 3. Submittals - Section 01300.
 - 4. Contract Closeout - Section 01700.
- E. Work With No Identified Payment Items: No additional payment will be made for items of work for which a separate payment item is not specified or contained in the Bid Schedule; such work shall be deemed incidental to the project and payment for said work shall be considered as included in the various unit bid prices.

1.2 APPLICATIONS FOR PAYMENT:

- A. Refer to 00 50 00 “Contracting Forms and Supplements”.
- B. Submittal Schedule: Submit Applications for Payment to the Engineer in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.
- C. Format and Data Required:
 - 1. Submit Applications for Partial Payment on the form required by Owner with itemized data typed on 8 1/2 x 11-inch white paper continuation sheets.

2. Provide itemized data on continuation sheet: Format, schedules, line items and values: Those of the Schedule of Values accepted by the Engineer.
- D. Preparation of Application for Each Progress Payment:
1. Refer to 00 50 00 "Contracting Forms and Supplements".
 2. Application Form:
 - a. Fill in required information, including that for Change Orders executed prior to the date of submittal of application.
 - b. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheets.
 - c. Execute certification with the signature of a responsible officer of the contract firm.
 3. Continuation Sheets:
 - a. Fill in total list of all scheduled component items of work, with item number and the scheduled dollar value for each item.
 - b. Fill in the dollar value in each column for each scheduled line item when work has been performed or products stored. Round off values to the nearest dollar, or as provided in the bid.
 4. List each Change Order executed prior to the date of submission, at the end of the continuation sheets.
 - a. List by Change Order and description, as for an original component item of work.
 - 1) Submit Applications for Payment to Owner at the times stipulated in the Agreement.
- E. Substantiating Data:
1. When the Owner or Engineer require substantiating data, Contractor shall submit suitable information with cover letter identifying:
 - a. Project.
 - b. Application number and date.
 - c. Detailed list of enclosures.
 - d. For stored products: Item number and identification as shown on application.
 - e. Description of specific material.
 2. Submit one copy of data and cover letter for each copy of application.
- F. Preparation of Application for Final Payment:
1. Fill in application form as specified for progress payments.
 2. Use continuation sheet for presenting the final statement of accounting as specified in Section 01700 - Contract Closeout.

1.3 CHANGE ORDER PROCEDURES:

- A. Refer to 00 50 00 "Contracting Forms and Supplements".
- B. Format and Data Required:
 - 1. Change Orders shall be prepared and submitted and will be processed in accordance with requirements of General Provisions and Funding Agency Requirements.
 - 2. When Owner and Agency approval is received, Change Order will be included under next partial Application for Payment.

1.4 MEASURES AND WEIGHTS:

- A. Contractor Assistance: To aid the Owner in determining all quantities, the Contractor shall, whenever so requested, provide scales, equipment and assistance for weighing or for measuring any of the materials at no cost to the Owner.
- B. Weights and Measures: Quantities for payment will be the actual weight or actual measure, and no special or trade or so-termed customary allowances will be made, nor will any material, which is lost or misplaced, be included for payment.
- C. Use of Plan Meter: For estimating quantities in which computation of areas by geometric methods would be comparatively laborious, it is agreed that the plan meter shall be considered an instrument of precision to the measurement of such areas.
- D. Precedence of Dimensions: Figured dimensions on drawings shall take precedence over measurement by scale, and detailed working drawings are to take precedence over general drawings and shall be considered as explanatory of them and not as indicating extra work.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01150

**SECTION 01210
ALLOWANCES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) Section 01250, "Contract Modification Procedures"
 - 2) Section 01270, "Unit Prices"
 - 3) Section 01400, "Quality Requirements and Testing Laboratory Services"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1) Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
 - 1) Lump-sum allowances.
 - 2) Unit-cost allowances.
 - 3) Equipment and furnishing allowances.

1.3 SELECTION AND PURCHASE

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

1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 COORDINATION

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

1.6 LUMP-SUM AND UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner under allowance and shall include taxes, freight, and delivery to Project site.
- B. Contractor's costs for receiving and handling at Project site, labor, installation, general conditions, overhead and profit, and similar costs related to products and materials ordered by Owner under allowance shall be included as part of the Contract Sum and not part of the allowance. Labor costs shall be excluded from allowances where noted within the allowance description.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.

1.7 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1) Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2) If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3) Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4) Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1) Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.

- 2) No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.
- C. At Project closeout, credit to Owner as a Change Order any remaining unused allowance amounts, including the Contractor's costs for general conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

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

3.3 SCHEDULE OF ALLOWANCES

- B. Allowance No. 1: SPECIAL INSPECTIONS = \$5,000.

END OF SECTION 01210

**SECTION 01 22 00
UNIT PRICES**

PART 1 GENERAL

1.01 SECTION INCLUDES

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

1.02 RELATED REQUIREMENTS

- A. Document 00 21 13 - Instructions to Bidders: Instructions for preparation of pricing for Unit Prices.
- B. Document 00 43 22 - Unit Prices Form: List of Unit Prices as supplement to Bid Form
- C. Section 01 20 00 - Price and Payment Procedures: Additional payment and modification procedures.

1.03 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.

1.04 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.

1.05 MEASUREMENT OF QUANTITIES

- A. Measurement methods delineated in the individual specification sections complement the criteria of this section.
- B. Take all measurements and compute quantities. Measurements and quantities will be verified by Architect.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.
- D. Measurement Devices:
 - 1. Weigh Scales: Inspected, tested and certified by the applicable state Weights and Measures department within the past year.
 - 2. Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
 - 3. 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.
- 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.
- I. 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 Architect prior to starting work.
- K. Contractor's Engineer Responsibilities: Sign surveyor's field notes or keep duplicate field notes, calculate and certify quantities for payment purposes.

1.06 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 Architect, multiplied by the unit price.
- B. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from the transporting vehicle.
 - 4. Products placed beyond the lines and levels of the required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected Products.

1.07 DEFECT ASSESSMENT

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

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01250
CONTRACT MODIFICATION PROCEDURES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 40, "Scope of Work"
 - 2) General Provision Section 50, "Control of Work"
 - 3) Section 00 72 00, "General Conditions"
 - 4) General Provision Section 80, "Execution and Progress"
 - 5) General Provision Section 90, "Measurement and Payment"
 - 6) Section 01135, "Weather Delays"
 - 7) Section 01201, "Allowances"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing and documenting Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: The Owner or Owner's designated representative will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1) Proposal Requests issued by the Owner or designated representative are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.

- 2) Within **15 days** after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
 - 1) Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2) Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3) Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4) Include costs of labor and supervision directly attributable to the change.
 - 5) Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6) Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests or forms provided by Owner.

1.5 ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1) Include installation costs in purchase amount only where indicated as part of the allowance.

- 2) If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3) Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4) Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within **15 days** of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than 15 days after such authorization.
- 1) Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 - 2) No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on the form to be provided by the Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01250

**CITY OF JONESBORO
GENERAL AVIATION CENTER
INFORMATION NOTICE No. IN - _____**

DATE: _____

FROM: _____

TO: _____

SUBJECT: _____

SPECIFICATION NO: _____

DRAWING

REFERENCE: _____

DESCRIPTION:

Architect or Construction
Manager Company _____

Signature: _____

If this notice causes any cost or time impact to your work, do not proceed; submit a Change Proposal (CP) for changes in Contract Sum and/or Time within fifteen (15) days. If this response indicates no change to the Work or a minor change to the Work consistent with the Contract Documents, indicate your acceptance of this notice in the space indicated below and return a copy prior to proceeding.

Accepted By: _____ Date: _____

- cc: ARCHITECT
CONTRACTOR
OWNER'S REPRESENTATIVE

**CITY OF JONESBORO
GENERAL AVIATION CENTER**

CHANGE PROPOSAL No. CP - _____

DATE: _____

NOTICE OR REQUEST: **IN** or **IR** No. _____

SUBJECT: _____

DESCRIPTION OF PROPOSED MODIFICATIONS:

REFERENCE:

list any attached documents

Within fifteen (15) days of receiving a related Information Notice or Response to Information Request, submit an itemized proposal for changes in the Contract Sum and/or the Contract Time for the proposed modifications, or within two (2) days of notice of changed conditions, notify the Architect in writing of the date on which you anticipate submitting a Change Proposal.

THIS IS NOT A CONSTRUCTION CHANGE DIRECTIVE. THIS IS NOT A CHANGE ORDER. DO NOT CONSIDER THIS AS INSTRUCTION OR DIRECTION TO EITHER STOP WORK IN PROGRESS OR TO EXECUTE THE PROPOSED MODIFICATIONS. NO PAYMENT WILL BE MADE FOR WORK WHICH IS NOT PRIOR APPROVED IN WRITING.

Adjust Contract Sum for this change (Increase / Decrease) \$ _____

Adjust Contract Time for this change (Increase / Decrease calendar days) _____

Signed by: _____ Date: _____

Print Name: _____ (CONTRACTOR)

cc: ARCHITECT
CONTRACTOR
OWNER'S REPRESENTATIVE

**CITY OF JONESBORO
GENERAL AVIATION CENTER**

CONSTRUCTION CHANGE DIRECTIVE / FIELD DIRECTIVE No. CCD - _____

SUBJECT: _____

WORK IN PROCESS
CHANGE AUTHORIZATION
NO.: _____

MAKE THE FOLLOWING MODIFICATIONS TO THE CONTRACT:

Payment for work related to this Construction Change Directive will be:

- LUMP SUM \$ _____
- UNIT PRICE \$ _____ / _____ (Unit)
- TIME AND MATERIALS
- OTHER _____

Contract time will be as follows: _____

Signed by: _____ (ARCHITECT) Date: _____

_____ (OWNER) Date: _____

Construction shall proceed immediately with this Work upon receipt of this **CCD-**_____, if signed by the Owner and the Architect.

Signed by: _____ (CONTRACTOR) Date: _____

Contractor signature indicates agreement with payments and time modifications.

cc: ARCHITECT
CONTRACTOR
OWNER'S REPRESENTATIVE
BUILDING OFFICIAL*

* If required

**SECTION 01290
PAYMENT PROCEDURES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 40, "Scope of Work"
 - 2) General Provision Section 50, "Control of Work"
 - 3) Section 00 72 00, "General Conditions"
 - 4) General Provision Section 80, "Execution and Progress"
 - 5) General Provision Section 90, "Measurement and Payment"
 - 6) Section 01210, "Allowances"
 - 7) Section 01230, "Alternates"
 - 8) Section 01250, "Contract Modifications"
 - 9) Section 01320, "Construction Progress Documentation"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 DEFINITIONS

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

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1) Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - c. Contractor's Construction Schedule.

- 2) Submit the Schedule of Values to the Owner at earliest possible date but no later than 21 days before the date scheduled for submittal of initial Applications for Payment.
 - 3) Sub schedules: Where the Work is separated into phases requiring separately phased payments, provide sub schedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section. Provide labor and material breakdowns, and list all allowances and Owner-accepted alternates on as separate line items.
- 1) Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location and Owner's name.
 - b. Name of Architect.
 - c. Architect's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2) Submit draft of AIA Document G703 Continuation Sheets.
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value.
 - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 - 3) Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate. Include separate line items under required principal subcontracts for operation and maintenance manuals, punch list activities, Project Record Documents, and demonstration and training in the Contract Sum.
 - 4) Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 - 5) Retain first subparagraph and associated subparagraph below. Strengthen provisions below to protect against undue front-end loading if required.
 - 6) Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.

- 7) Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 8) Delete subparagraph below if Specifications do not include unit-cost allowances. Do not confuse unit-cost allowances with unit prices. See Evaluations in Division 1 Section "Allowances" for discussion on unit-cost allowances, including potential differences that can occur in dollar amounts between bidders as a result of different procedures in estimating quantities.
- 9) Allowances and Alternates: Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities. List Owner-accepted alternates as separate line items within the Schedule of Values.
- 10) Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Mobilization, Demobilization, Temporary Facilities and other major cost items that are not direct cost of actual work-in-place shall be shown as separate line items in the Schedule of Values.
- 11) Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect, and recommended for approval by the DCP authorized/approved and paid for by Owner.
 - 1) Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of design or construction Work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1) Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.

- 2) Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 3) Submit pencil copy of draft pay application to the Architect for initial review and concurrence with amounts being requested seven (7) days before submittal of notarized originals for processing.
 - 4) Confirm all mathematical calculations and that values on the cover page match the values within pay application back-up.
- E. Transmittal: Submit **1 (one)** signed and notarized original copy of each Application for Payment to Architect by a method ensuring receipt. One copy shall include waivers of lien, certified payroll, MBE/SBE certifications of payment amounts, stored material receipts and similar attachments if required.
- 1) Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
- 1) Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2) When an application shows completion of an item, submit final or full waivers.
 - 3) Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4) Submit final Application for Payment with or proceeded by final waivers from every entity involved with performance of the Work covered by the application that is lawfully entitled to a lien.
 - 5) Delete subparagraph below and insert a specific form or special requirements where predetermined. See Evaluations.
 - 6) Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
- 1) Revise list below to suit Project.
 - 2) List of subcontractors.
 - 3) Schedule of Values.
 - 4) Contractor's Construction Schedule (preliminary if not final).
 - 5) Products list.
 - 6) Schedule of unit prices.
 - 7) Submittals Schedule (preliminary if not final).
 - 8) List of Contractor's staff assignments.
 - 9) List of Contractor's principal consultants.
 - 10) Copies of building permits.
 - 11) Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 12) Initial progress report.
 - 13) Report of preconstruction conference.
 - 14) Certificates of insurance and insurance policies.

- H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
- 1) Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2) This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
- 1) Evidence of completion of Project closeout requirements.
 - 2) Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3) Updated final statement, accounting for final changes to the Contract Sum.
 - 4) AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - 5) AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - 6) Delete first subparagraph below if a surety is not involved.
 - 7) AIA Document G707, "Consent of Surety to Final Payment."
 - 8) Evidence that claims have been settled.
 - 9) Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 - 10) Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01290

**SECTION 01300
SUBMITTALS**

PART 1 - GENERAL

1.1 SUBMITTALS BY CONTRACTOR:

- A. Construction Progress Schedule.
- B. Certifications as specified in the various sections.
- C. Shop Drawings and Project Data as specified in the various sections.
- D. Miscellaneous:
 - 1. Weekly Payroll.
 - 2. EEO Reports.
 - 3. DBE Expenditure Report.
 - 4. Safety Plan.
 - 5. Security Plan.
 - 6. Warranties and Bonds.
 - 7. QC Plan.
 - 8. Equipment Manuals
 - 9. Other(s) as required.

1.2 PROGRESS SCHEDULE:

- A. Bar-Chart Schedule: Submit a CPM or linear type bar-chart schedule 7 calendar days prior to the preconstruction conference date established for the work. On the schedule, indicate a time bar for each major category or unit of work to be performed at the site, properly sequenced and coordinated with other elements of work. Show completion of the work sufficiently in advance of the date established for substantial completion of work.
- B. Phasing: Arrange schedule with notations to show how sequence of work is affected by requirements for phased completion, limitations of continued utilization, non-interrupt able services, use prior to substantial completion, site restrictions, runway and/or taxiway closures, provisions for future work, seasonal variations, environmental control, and similar provisions of total project. Phase I schedule is required at the preconstruction meeting. Each subsequent phasing schedule is required at least two weeks before the phase is to begin. Refer to other sections of the General Requirements and other contract documents for requirements.

- C. Update: Contractor shall update the schedule as requested for duration of construction.

1.3 SHOP DRAWINGS AND PRODUCT DATA:

- A. Scope: Submit shop drawings, certifications, and product data for all products to be incorporated in the work.
- B. Shop Drawings Shall:
 - 1. Be original drawings, prepared by the Contractor, subcontractor, supplier, or distributor, which illustrate some portion of the work; showing fabrication, layout, setting, or erection details.
 - 2. Be prepared by a qualified detailer.
 - 3. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
 - 4. Be a size appropriate to communicate the necessary information.
 - 5. Be digital.
- C. Product Data Shall:
 - 1. Include manufacturer's standard schematic drawings. The Contractor shall:
 - a. Modify drawings to delete information, which is not applicable to project.
 - b. Supplement standard information to provide additional information applicable to project.
 - 2. Include manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data. The Contractor shall:
 - a. Clearly mark each copy to identify pertinent materials or products.
 - b. Show dimensions and clearances required.
 - c. Show performance characteristics and capacities.
- D. The Contractor Shall:
 - 1. Be responsible for all submittals.
 - 2. Review shop drawings and product data prior to submission
 - 3. Verify:
 - a. Field measurements.
 - b. Field construction criteria.
 - c. Catalog numbers and similar data.
 - 4. Coordinate each submittal with the requirements of the work and of the Contract Documents.
 - 5. Notify the Engineer, in writing at time of submission, of deviations in submittals from requirements of the Contract Documents.
 - 6. Begin no work, which requires submittals until the return of submittals with the Engineer's stamp and initials or signature indicating review.

7. After the Engineer's review, distribute copies.
- E. Contractor's Responsibilities:
1. Contractor's responsibility for errors and omissions in submittals is not relieved by the Engineer's review of submittals.
 2. Contractor's responsibility for deviations in submittals from requirements of the Contract Documents is not relieved by the Engineer's review of submittal, unless the Engineer gives written acceptance of specific deviations.
- F. Submission Requirements Include:
1. The shop drawings shall be submitted in sufficient time to allow discussion and correction prior to beginning the work. Work shall not be performed nor materials ordered prior to the review of the drawings except at the Contractor's risk.
 2. Submit digital **.pdf** files of all shop drawings unless hardcopies are requested or necessary to communicate the information. Any drawings returned for correction must be resubmitted in the same format.
 3. All submittals must be accompanied by a transmittal letter containing:
 - a. Date.
 - b. Project title and number.
 - c. Contractor's name and address.
 - d. The number of each shop drawing and product data submitted.
 - e. Notification of deviations from Contract Documents.
 - f. Other pertinent data.
 4. Submittals shall include the following, as applicable:
 - a. Date and revision dates.
 - b. Project title and number.
 - c. The names of:
 - 1) Engineer.
 - 2) Contractor.
 - 3) Subcontractor.
 - 4) Supplier.
 - 5) Manufacturer.
 - 6) Separate detailer when pertinent.
 - d. Identification of product or material.
 - e. Relation to adjacent structure or materials.
 - f. Field dimensions, clearly identified as such.
 - g. Specification item or section number.
 - h. Applicable standards, such as ASTM number or Federal Specification.
 - i. A blank space, 5 in. x 5 in., for the Engineer's stamp.
 - j. Identification of deviations from the Contract Documents.

- k. Contractor's stamp, initialed or signed, certifying Contractor's review of submittal, verification of field measurements, and compliance with Contract Documents.
- G. Resubmission Requirements Include:
- 1. Revision of initial drawings as required and resubmittal as specified for initial submittal.
 - 2. An indication on the drawings of any changes, which have been made, other than those requested by the Engineer.
 - 3. On product data resubmittals, include new data as required for initial submittal.
- H. Distribution to Others: After review and approval, the Contractor shall distribute copies of shop drawings and product data which carry the Engineer's stamp to others as may be required.
- I. Shop Drawings and Product Data:
- 1. Submit notarized certifications cosigned by manufacturer/supplier and Contractor for:
 - a. Storm drainage pipe, castings and structure materials.
 - b. Fencing components.
 - c. Pavement sub base, base, and surfacing and related materials.
 - d. Grass seed and/or sod.
 - e. Structural concrete materials.
 - f. Reinforcing steel.
 - g. Pavement marking paint.
 - h. Electrical wire and fixtures.
 - i. Lighting components.
 - j. All other products as required by the drawings, specifications, and Engineer.
 - 2. Submit shop drawings, product data and steel placement plans for:
 - a. All cast-in-place or precast structures.
 - b. Catch basin and manhole grate cover and frame castings.
 - c. Airport lighting equipment and materials.
 - d. Concrete and asphalt mix designs.
 - e. All other products as required by the drawings, specifications, and Engineer.
- 1.4 MISCELLANEOUS:
- A. Equipment Manual: Prepare an Installation, Operation, and Maintenance Manual for all airport lighting and other installed as a part of this contract. This manual shall be a vinyl notebook with ring bound compilation of manufacturers'

instructions and maintenance manuals. Prepare this manual, marking out sections, which do not apply, and present four (4) copies to the Owner through the Engineer after the final inspection is complete. Final payment will not be processed until the Owner has received and accepted the Manual.

B. Weekly Payrolls:

1. In accordance with the Required Federal Bid and Contract Provisions submit certified weekly payrolls for prime contractor and all subcontractors working at project site.
2. Submit payrolls no later than 7 calendar days after pay period. Payrolls will be considered current if received within 10 calendar days after last workday of payroll workweek. A workweek is the seven day period between midnight Sunday and midnight the following Sunday.
3. The Contractor is responsible for submission of payrolls by his subcontractors.
4. Submit a typed summary sheet with each payroll submission listing by week when contractor and each subcontractor worked at site.
5. A payroll submission is only required for weeks when Contractor or subcontractor is actually working at the site.

C. EEO Reports:

1. Contractor shall submit Monthly Employment Utilization Report and Annual EEO-1 Report to the appropriate Federal Labor Area Office in accordance with Section FCP of the General Provisions. Submit copy of submittal to Owner for his records.
2. Prime Contractor shall insure that all his first tier subcontractors submit these reports and shall submit a sworn statement to Owner monthly certifying that all subcontractor reports have been submitted as required.

D. DBE Expenditure Reports: With each application for payment, the Contractor shall submit his DBE expenditure report indicating the name, date and amount disbursed to his DBE subcontractors for the period as well as for the project to date expenditure.

E. Warranties and Bonds: Submit as specified in Section 01740.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01300

**SECTION 01310
PROJECT MANAGEMENT AND COORDINATION**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 30, "Award and Execution of Contract"
 - 2) General Provision Section 40, "Scope of Work"
 - 3) General Provision Section 50, "Control of Work"
 - 4) Section 00 72 00, "General Conditions"
 - 5) General Provision Section 80, "Execution and Progress"
 - 6) General Provision Section 90, "Measurement and Payment"
 - 7) Section 01100, "Summary"
 - 8) Section 01210, "Allowances"
 - 9) Section 01320, "Construction Progress Documentation"
 - 10) Section 01700, "Execution Requirements"
 - 11) Section 01770, "Closeout Procedures"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1) Coordination Drawings.
 - 2) Administrative and supervisory personnel.
 - 3) Project meetings.
 - 4) Requests for Interpretation (RFIs).

1.3 DEFINITIONS

- A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work.

Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.

- 1) Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2) Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3) Make adequate provisions to accommodate items scheduled for later installation.
 - 4) Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
- 1) Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
- 1) Preparation of Contractor's Construction Schedule.
 - 2) Preparation of the Schedule of Values.
 - 3) Installation and removal of temporary facilities and controls.
 - 4) Delivery and processing of submittals.
 - 5) Progress meetings.
 - 6) Pre-installation conferences.
 - 7) Project closeout activities.
 - 8) Startup and adjustment of systems.
 - 9) Project closeout activities.

1.5 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings including all components where limited space availability necessitates maximum utilization of space for efficient installation of different components and where coordination is required for installation of products and materials fabricated by separate entities.
- 1) Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate required installation sequences.

- c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to A/E for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- 2) Sheet Size: Size appropriate to communicate information.
 - 3) Number of Copies: (1) digital/PDF copy of each submittal.
 - a. Submit only Contractor-approved and reviewed submittals. Submittals may be stamped on a cover sheet when all pages are sequentially numbered (1 of..., 2 of..., 3 of ..., etc.), and labeled within an index.
 - b. All submittals and reports shall be submitted to the Owner and RPR concurrently with the A/E submittals.
 - 4) Refer to individual Sections for additional Shop Drawing, Submittals, and Coordination Drawing requirements outlined in those Sections.
- B. Key Personnel Names: At least fifteen (15) calendar days to starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, cell, and office telephone numbers. Provide names, addresses, and all telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
- 1) Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.6 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
- 1) Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and A/E of scheduled meeting dates and times.
 - 2) Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3) Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and A/E, within three business days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and A/E, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
- 1) Attendees: Authorized representatives of Owner, A/E, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

- 2) Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties; Contractor to submit a list of proposed Subcontractors and contact information.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Preparation of Record Documents.
 - l. Use of the premises and existing building.
 - m. Work restrictions.
 - n. FAA Requirements.
 - o. Owner's occupancy requirements.
 - p. Responsibility for temporary facilities and controls.
 - q. Construction waste management and recycling.
 - r. Parking availability.
 - s. Office, work, and storage areas.
 - t. Equipment deliveries and priorities.
 - u. First aid.
 - v. Security.
 - w. Progress cleaning.
 - x. Working hours.
 - y. The Contractor shall submit a Product Schedule per Section 01330 – submittal Procedures.
 - 3) Minutes: The Contractor, RPR or A/E will record and distribute meeting minutes.
- C. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
- 1) Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise A/E of scheduled meeting dates a minimum of fourteen (14) calendar days of the meeting.
 - 2) Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. The Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.

- g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility problems.
 - k. Time schedules.
 - l. Weather limitations.
 - m. Manufacturer's written recommendations.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - t. Testing and inspecting requirements.
 - u. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. Protection of construction and personnel.
- 3) Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4) Reporting: The Contractor will distribute minutes of the meeting to each party present and to parties who should have been present.
 - 5) Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at weekly intervals or as directed by the Owner. Coordinate dates of meetings with preparation of payment requests.
- 1) Attendees: In addition to the RPR, Owner's representatives and A/E, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2) Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.

- 2) In advance of the meeting, Contractor shall prepare a narrative two-week look-ahead outline of the work to be completed and the work completed the previous two (2) weeks.
- b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
 - 3) Minutes: The Contractor or the A/E will record and distribute the meeting minutes to the Contractor and all attendees.
 - 4) Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: Conduct Project coordination meetings at monthly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and pre-installation conferences.
- 1) Attendees: In addition to representatives of Owner, A/E and the Contractor, each subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2) Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how construction activities that are behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
- b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
- c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Change Orders.
- 3) Reporting: The Contractor will record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.7 REQUESTS FOR INTERPRETATION (RFIs)

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

- 5) Name of A/E.
 - 6) RFI number, numbered sequentially.
 - 7) Specification Section number and title and related paragraphs, as appropriate.
 - 8) Drawing number and detail references, as appropriate.
 - 9) Field dimensions and conditions, as appropriate.
 - 10) Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 11) Contractor's signature.
 - 12) Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
 - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs: CSI Form 13.2A, or other industry-standard form approved as equal by A/E.
- 1) Identify each page of attachments with the RFI number and sequential page number.
 - 2) Electronic copies are encouraged to minimize paper usage.
- D. Software-Generated or Digital RFIs: Scanned software-generated form with substantially the same content as indicated above.
- 1) Attachments shall be electronic files in Adobe Acrobat PDF format; all documents shall be combined into a single file. Files over 9 megs may be sub-divided and transmitted in multiple emails labeled 1 of 2, 2 of 2, etc.
- E. A/E's (or Owner's when applicable) Action: A/E (or the Owner or Owner's designated representative when applicable) will review each RFI, determine action required, and return it. Allow ten working days for A/E's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
- 1) The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of A/E's actions on submittals.
 - f. Incomplete RFIs or RFIs with numerous errors.
 - 2) A/E's (or Owner's where applicable) action may include a request for additional information, in which case A/E's time for response will start again.
 - 3) A/E's (or Owner's where applicable) action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."

- a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify A/E and the Owner in writing within ten (10) days of receipt of the RFI response.
- F. On receipt of A/E's or the Owner's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify A/E and the Owner within three (3) days if Contractor disagrees with response.
- G. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Software log with not less than the following:
- 1) Project name.
 - 2) Project identification numbers.
 - 3) Name and address of Contractor.
 - 4) Name and address of A/E.
 - 5) RFI number including RFIs that were dropped and not submitted.
 - 6) RFI description.
 - 7) Date the RFI was submitted.
 - 8) Date A/E's response was received.
 - 9) Retain one of two subparagraphs below. First is for use with AIA Document A201; second is for use with EJCDC Document 1910-8.
 - 10) Identification of related Minor Change in the Work, Construction Change Directive, and Change Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01310

**CITY OF DEFUNIAK SPRINGS AIRPORT AUTHORITY
GENERAL AVIATION CENTER**

REQUEST FOR INFORMATION No. RFI – _____

SUBJECT: _____
SPECIFICATION REF.: _____
DRAWING REF.: _____

DESCRIPTION:

PROPOSED SOLUTION:

COMPANY NAME: _____

Submitted by: _____ Date: _____

RESPONSE:

Signed by A/E: _____ Date: _____

If this response causes any cost or time impact to your work, do not proceed; submit a Change Proposal (CP) for changes in Contract Sum and/or Time within fifteen (15) days. If this response indicates no change to the Work or a minor change to the Work consistent with the Contract Documents, indicate your acceptance of this response in the space indicated below and return a copy prior to proceeding.

Accepted by : _____ Date: _____
Contractor Signature

cc: ARCHITECT/ENGINEER
CONTRACTOR
OWNER'S REPRESENTATIVE

SECTION 01320
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 30, "Award and Execution of Contract"
 - 2) General Provision Section 40, "Scope of Work"
 - 3) General Provision Section 50, "Control of Work"
 - 4) Section 00 72 00, "General Conditions"
 - 5) General Provision Section 80, "Execution and Progress"
 - 6) General Provision Section 90, "Measurement and Payment"
 - 7) Section 01100, "Summary"
 - 8) Section 01290, "Payment Procedures"
 - 9) Section 01310, "Project Management"
 - 10) Section 01322, "Photographic Documentation"
 - 11) Section 01330, "Submittal Procedures"
 - 12) Section 01400, "Quality Requirements"
 - 13) Section 01700, "Execution Requirements"
 - 14) Section 01770, "Closeout Procedures"
 - 15) Section 01781, "Project Record Documents"
 - 16) Item C-100, "Contractor Quality Control Program (CQCP)"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1) Preliminary Construction Schedule.
 - 2) Contractor's Construction Schedule.
 - 3) Submittals Schedule.
 - 4) Daily construction reports.
 - 5) Material location reports.
 - 6) Field condition reports.
 - 7) Special reports.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1) Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 - 2) Predecessor Activity: An activity that precedes another activity in the network.
 - 3) Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by the Owner or the Owner's designated representative.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Float: The measure of leeway in starting and completing an activity.
 - 1) Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 - 2) Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 - 3) Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- F. Major Area: A story of construction, a separate building, or a similar significant construction element.
- G. Milestone: A key or critical point in time for reference or measurement.
- H. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 SUBMITTALS

- A. Qualification Data: For scheduling consultant.
- B. Submittals Schedule: Submit one digital (pdf.) of schedule. Arrange the following information in a tabular format:
 - 1) Scheduled date for first submittal.
 - 2) Specification Section number and title.

- 3) Submittal category (action or informational).
- 4) Name of subcontractor.
- 5) Description of the Work covered.
- 6) Scheduled date for A/E's final release or approval.

C. Preliminary Construction Schedule: Submit one digital (pdf.).

- 1) Approval of cost-loaded preliminary construction schedule will not constitute approval of Schedule of Values for cost-loaded activities.

D. Contractor's Construction Schedule: Submit one digital copy of updated schedule, large enough to show entire schedule for entire construction period. Submit update schedule at each progress meeting and with each pay application.

E. Daily Construction Reports: Submit at monthly intervals.

F. Material Location Reports: Submit at monthly intervals.

G. Field Condition Reports: Submit at time of discovery of differing conditions.

H. Special Reports: Submit at time of unusual event; one (1) copy shall be sent directly to the Owner.

1.5 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

- 1) Secure time commitments for performing critical elements of the Work from parties involved.
- 2) Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, re-submittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

- 1) Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
- 2) Initial Submittal: Submit concurrently with preliminary bar-chart schedule. Include submittals required during the first 60 days of construction. List those required to

maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.

- a. At Contractor's option, show submittals on the Preliminary Construction Schedule, instead of tabulating them separately.
- 3) Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.
- 4) Update the submittal schedule as required or requested by the Owner to reflect updates in the schedule of work.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
 - 1) Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 - 1) Activity Duration: Define activities so no activity is longer than 30 days, unless specifically allowed by the Owner or the Owner's designated representative.
 - 2) Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 30 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - a. Door Hardware and Access Control Devices
 - b. Roofing Accessories
 - c. Wall Coverings
 - d. Long lead delivery items or equipment
 - e. Lighting Fixtures
 - f. Fire and Smoke Detection, Alarm, and Annunciation Systems
 - 3) Submittal Review Time: Include review and re-submittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
 - 4) Startup and Testing Time: Include not less than seven days for startup and testing.
 - 5) Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for A/E's administrative procedures necessary for certification of Substantial Completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.

- 1) Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 - 2) Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
 - 3) Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Subcontract awards.
 - b. Submittals.
 - c. Purchases.
 - d. Mockups.
 - e. Fabrication.
 - f. Sample testing.
 - g. Deliveries.
 - h. Installation.
 - i. Commissioning.
 - j. Tests and inspections.
 - k. Adjusting.
 - l. Curing.
 - m. Startup and placement into final use and operation.
 - 4) Other Constraints: Separate and Identify Work by project elements and areas within the Terminal Area.
 - a. Project elements are headings of work described in the Bid Submittal Form and Instructions to Bidders.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion, and the following interim milestones:
- 1) Begin and end dates for phases of work within named work areas
 - 2) Erection and removal of temporary fencing and temporary partitions in public areas
 - 3) Limiting access to public entrances
 - 4) Begin and end dates for any work in public areas
- E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragments to demonstrate the effect of the proposed change on the overall project schedule.

2.3 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule at least **fourteen days (14) prior** to date established for the Pre-Construction Conference.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first **90** days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within ten (10) days of receiving comments from the A/E. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1) For construction activities that require (3) three months or longer to complete, indicate an estimated completion percentage in five percent increments within time bar.

2.5 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1) Revise list below to suit Project.
 - 2) List of subcontractors at Project site.
 - 3) List of separate contractors at Project site.
 - 4) Approximate count of personnel at Project site.
 - 5) Equipment at Project site.
 - 6) Material deliveries.
 - 7) High and low temperatures and general weather conditions, including rainfall.
 - 8) Accidents.
 - 9) Meetings and significant decisions.
 - 10) Unusual events (refer to special reports).
 - 11) Stoppages, delays, shortages, and losses.
 - 12) Meter readings and similar recordings.
 - 13) Emergency procedures.
 - 14) Orders and requests of authorities having jurisdiction.
 - 15) Change Orders received and implemented.
 - 16) Services connected and disconnected.
 - 17) Equipment or system tests and startups.
 - 18) Partial Completions and occupancies.
 - 19) Substantial Completions authorized.

- B. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.6 SPECIAL REPORTS

- A. General: Submit special reports directly to RPR and Owner within (24) twenty-four hours of an occurrence. Distribute copies of report to parties affected by the occurrence. Distribute copy of special reports to the A/E.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, and response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - 1) Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2) Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3) As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to A/E, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1) Post copies in Project meeting rooms and temporary field offices.
 - 2) When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their

assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01320

SECTION 01400
QUALITY CONTROL SERVICES

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS:

A. SECTION 01 45 33 CODE REQUIRED SPECIAL INSPECTIONS

1. Where conflict between this section and Section 01 45 33 exist, follow the more stringent requirement.

1.2 RELATED DOCUMENTS: Drawings, General Provisions, Supplementary Conditions, Specifications, and other Contract Documents apply to work of this Section.

1.3 DESCRIPTION OF REQUIREMENTS:

- A. General: Required inspection and testing services are intended to assist in the determination of probable compliance of the work with requirements specified or indicated. These required services do not relieve the Contractor of responsibility for compliance with these requirements or for compliance with requirements of the Contract Documents.
- B. Specified Inspection and Tests: Inspection, tests and related actions specified in this section and elsewhere in the Contract Documents are not intended to limit the Contractor's own quality control procedures which facilitate overall compliance with requirements of the Contract Documents.
- C. Contractor Quality Control: Requirements for the Contractor to provide quality control services as required by the Engineer, the Owner, and the provisions of this section do not limit governing authorities or other authorized entities.
- D. Contractor's Quality Control Personnel and Laboratory: Contractor shall conform to the requirements of General Construction Items Section C-100 and all technical specifications as listed in this manual.

1.4 RESPONSIBILITIES:

- A. Contractor Responsibilities: Contractor is responsible for his own quality control testing and inspection to ensure the quality of his means and methods of

construction will produce the specified quality of work, and for any tests and inspections required by regulatory agencies. Costs for these services shall be included in the contract sum. The Contractor may employ and pay an independent agency, testing laboratory or other qualified firm to perform quality control services specified, or qualified contractor personnel may perform these services.

- B. The Contractor shall submit for Engineer's approval a Quality Control (QC) Plan delineating his methods for each item requiring inspections, tests, and similar services.
- C. Quality Assurance: The Owner will engage and pay for the services of an independent agency to perform inspections and tests of materials for Quality Assurance. The Owner's quality assurance testing shall in no way relieve the Contractor of the responsibility for providing the quality materials, workmanship and testing required to comply with these specifications.
- D. Retest Responsibility: Where results of required inspections, tests, or similar services prove unsatisfactory and do not indicate compliance with the requirements of the Contract Documents, then retests are the responsibility of the Contractor, and shall be deducted from monies due the Contractor on his monthly pay request, regardless of whether the original test was the Contractor's responsibility. Retesting of work revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original work.
- E. Responsibility for Associated Services: The Contractor is required to cooperate with the independent agencies performing required inspections, tests, and similar services. Provide such auxiliary services as are reasonably requested. Notify the testing agency sufficiently in advance of operations to permit assignment of personnel. These auxiliary services include but are not necessarily limited to the following:
 - 1. Providing access to the work.
 - 2. Taking samples or providing assistance with taking samples.
 - 3. Delivery of samples to test laboratories.
 - 4. Security and protection of samples and test equipment at the project site.
 - 5. Surveying services required establishing horizontal and vertical location of tests by Engineer's quality assurance testing laboratory.

1.5 SCHEDULE OF SERVICES: Each specification section identifies principal inspections, tests and similar services required by the Contractor Documents.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

- 3.1 REPAIR AND PROTECTION: Upon completion of inspection, testing, sample-taking, and similar services performed on the work, repair damaged work and test sites to eliminate deficiencies. Protect work exposed by or for quality control service activities, and protect repaired work. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.
- 3.2 MEASUREMENT AND PAYMENT: No measurement or payment will be made for work in this section; it will be considered as incidental cost to Mobilization and other items of work.

END OF SECTION 01400

SECTION 01 45 33 - CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Code-required special inspections.
- B. Testing services incidental to special inspections.
- C. Submittals.

1.2 DEFINITIONS

- A. Code or Building Code: ICC (IBC)-2012 Edition of the International Building Code and specifically, Chapter 17 - Special Inspections and Tests.
- B. Authority Having Jurisdiction (AHJ): Agency or individual officially empowered to enforce the building, fire and life safety code requirements of the permitting jurisdiction in which the Project is located.
- C. Special Inspection:
 - 1. Special inspections are inspections and testing of materials, installation, fabrication, erection or placement of components and connections mandated by the AHJ that also require special expertise to ensure compliance with the approved contract documents and the referenced standards.
 - 2. Special inspections are separate from and independent of tests and inspections conducted by Owner or Contractor for the purposes of quality assurance and contract administration.

1.3 REFERENCE STANDARDS

- A. ACI 318 - Building Code Requirements for Structural Concrete and Commentary 2014 (Errata 2017).
- B. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures 2016.
- C. ASTM D3740 - 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 2012a.
- D. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection 2018.

- E. AWS D1.4/D1.4M - Structural Welding Code - Reinforcing Steel 2011.
- F. ICC (IBC)-2012 - International Building Code 2012.

1.4 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Testing Agency Qualifications: Prior to the start of work, the Testing Agency shall:
 - 1. Submit agency name, address, and telephone number.
 - 2. Submit certification that Testing Agency is acceptable to Engineer of Record.
- C. Special Inspection Reports: After each special inspection, Special Inspector shall promptly submit two copies of report; one to Architect and one to the AHJ.
 - 1. Include:
 - a. Date issued.
 - b. Project title and number.
 - c. Name of Special Inspector.
 - d. Date and time of special inspection.
 - e. Identification of product and specifications section.
 - f. Location in the Project.
 - g. Type of special inspection.
 - h. Date of special inspection.
 - i. Results of special inspection.
 - j. Compliance with Contract Documents.
 - 2. Final Special Inspection Report: Document special inspections and correction of discrepancies prior to the start of the work.

1.5 SPECIAL INSPECTION AGENCY

- A. Owner or Architect will employ services of a Special Inspection Agency to perform inspections and associated testing and sampling in accordance with ASTM E329 and required by the building code.
- B. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 SCHEDULE OF SPECIAL INSPECTIONS, GENERAL

- A. Frequency of Special Inspections: Special Inspections are indicated as continuous or periodic.

1. Continuous Special Inspection: Special Inspection Agency shall be present in the area where the work is being performed and observe the work at all times the work is in progress.
2. Periodic Special Inspection: Special Inspection Agency shall be present in the area where work is being performed and observe the work part-time or intermittently and at the completion of the work.

3.2 SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION

- A. Reinforcing Steel: Verify compliance with approved contract documents and ACI 318, Sections 3.5 and 7.1 through 7.7; periodic.
- B. Design Mix: Verify plastic concrete complies with the design mix in approved contract documents and with ACI 318, Chapter 4 and 5.2; periodic.
- C. Specified Curing Temperature and Techniques: Verify compliance with approved contract documents and ACI 318, Sections 5.11 through 5.13; periodic.
- D. Concrete Strength in Situ: Verify concrete strength complies with approved contract documents and ACI 318, Section 6.2, for the following.
- E. Formwork Shape, Location and Dimensions: Verify compliance with approved contract documents and ACI 318, Section 6.1.1; periodic.

3.3 SPECIAL INSPECTIONS FOR MASONRY CONSTRUCTION

- A. Masonry Structures Subject to Special Inspection:
 1. Empirically designed masonry, glass unit masonry and masonry veneer in structures designated as "essential facilities".
 2. Engineered masonry in structures classified as "low hazard..." and "substantial hazard to human life in the event of failure".
- B. Verify each item below complies with approved contract documents and the applicable articles of TMS 402/602.
 1. Inspections and Approvals:
 - a. Verify compliance with the required inspection provisions of the approved contract documents; periodic.
 - b. Verify approval of submittals required by contract documents; periodic.
 2. Compressive Strength of Masonry: Verify compressive strength of masonry units prior to start of construction unless specifically exempted by code; periodic.
 3. Slump Flow and Visual Stability Index (VSI): Verify compliance as self-consolidating grout arrives on site; continuous.
 4. Joints and Accessories: When masonry construction begins, verify:

- a. Proportions of site prepared mortar; periodic.
- b. Construction of mortar joints; periodic.
- c. Location of reinforcement, connectors, prestressing tendons, anchorages, etc; periodic.
5. Structural Elements, Joints, Anchors, Protection: During masonry construction, verify:
 - a. Size and location of structural elements; periodic.
 - b. Type, size and location of anchors, including anchorage of masonry to structural members, frames or other construction; periodic.
 - c. Size, grade and type of reinforcement, anchor bolts and prestressing tendons and anchorages; periodic.
 - d. Welding of reinforcing bars; continuous.
6. Grouting Preparation: Prior to grouting, verify:
 - a. Grout space is clean; periodic.
 - b. Correct placement of reinforcing, connectors, prestressing tendons and anchorages; periodic.
 - c. Correctly proportioned site prepared grouts and prestressing grout for bonded tendons; periodic.
 - d. Correctly constructed mortar joints; periodic.
7. Preparation of Grout Specimens, Mortar Specimens and Prisms: Observe preparation of specimens; periodic.

3.4 SPECIAL INSPECTIONS FOR SOILS

- A. Materials and Placement: Verify each item below complies with approved construction documents and approved geotechnical report.
 1. Design bearing capacity of material below shallow foundations; periodic.
 2. Design depth of excavations and suitability of material at bottom of excavations; periodic.
 3. Materials, densities, lift thicknesses; placement and compaction of backfill: continuous.
 4. Subgrade, prior to placement of compacted fill; periodic.
- B. Testing: Classify and test excavated material; periodic.

3.5 SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE

- A. Designated Seismic System Verification: Verify label, anchorage or mounting complies with certificate of compliance provided by manufacturer or fabricator.
- B. Structural Observations for Seismic Resistance: Visually observe structural system for general compliance with the approved contract documents; periodic.

END OF SECTION

SCHEDULE OF SPECIAL INSPECTION SERVICES						
PROJECT	(Completed by the Registered Design Professional in Responsible Charge)					
MATERIAL / ACTIVITY	SERVICE	Y/N	EXTENT	AGENT*	APPLICABLE TO THIS PROJECT	
					DATE COMPLETED	
1704.2.5 Inspection of Fabricators						
Verify fabrication/quality control procedures.	In-plant review (3)		Periodic			
1705.1.1 Special Cases (work unusual in nature, including but not limited to alternative construction materials, unusual design applications, systems or materials with special manufacturer requirements. Attach 8 1/2x11 if needed).	Submittal review, shop(3) inspection and/or field inspection.					
1705.3 Concrete Construction						
1. Inspection of reinforcing steel placement	Field inspection		Periodic			
2. Inspection of prestressing steel placement	In-plant or field review		Periodic			
3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used	Shop (3) and field inspection		Continuous			
4. Inspection of anchors and reinforcing steel post-installed in hardened concrete: Per research reports requirements	Field inspection		Periodic or as required by the research report issued by an approved source			
5. Verify use of approved design mix	Shop (3) and field inspection		Periodic			
6. Fresh concrete sampling, perform slump and air content tests and determine temperature of concrete	Shop (3) and field inspection		Continuous			
7. Inspection of concrete and shotcrete placement for proper application techniques	Shop (3) and field inspection		Continuous			

8. Inspection for maintenance of specified curing temperature and techniques	Shop (3) and field inspection				
9. Inspection of prestressed concrete:	In-plant or field review				
a. Application of prestressing forces				Periodic	
b. Grouting of bonded prestressing tendons in the seismic-force-resisting system				Continuous	
10. Erection of precast concrete members				Continuous	
a. Inspect in accordance with construction documents	Field inspection			Periodic	
b. Perform inspections of welding and bolting in accordance with Section 1705.2	Field inspection			In accordance with Section 1705.2	
11. Verification of in-situ concrete strength, prior to stressing of tendons in post tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	Field testing and review of laboratory reports			Periodic	
12. Inspection of formwork for shape, lines, location and dimensions	Field inspection			Periodic	
13. Concrete strength testing and verification of compliance with construction documents	Field testing and review of laboratory reports			Periodic	
1705.4 Masonry Construction					
(A) Level A, B and C Quality Assurance:					
1. Verify compliance with approved submittals	Field Inspection			Periodic	
(B) Level B Quality Assurance:					
1. Verification of f'_m and f'_{AAC} prior to construction	Testing by unit strength method or prism test method			Periodic	
(C) Level C Quality Assurance:					

	Testing by unit strength method or prism test method		Periodic		
1. Verification of f'_m and f'_{AAC} prior to construction and for every 5,000 SF during construction	Field inspection		Continuous		
2. Verification of proportions of materials in premixed or preblended mortar, prestressing grout, and grout other than selfconsolidating grout, as delivered to the project site	Field Inspection		Periodic		
3. Verify placement of masonry units					
(D) Levels B and C Quality Assurance:					
1. Verification of Slump Flow and Visual Stability Index (VSI) of selfconsolidating grout as delivered to the project	Field testing		Continuous		
2. Verify compliance with approved submittals	Field inspection		Periodic		
3. Verify proportions of site-mixed mortar, grout and prestressing grout for bonded tendons	Field Inspection		Periodic		
4. Verify grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages	Field Inspection		Periodic		
5. Verify construction of mortar joints	Field Inspection		Periodic		
6. Verify placement of reinforcement, connectors, and prestressing tendons and anchorages	Field Inspection		Level B - Periodic		
7. Verify grout space prior to grouting	Field Inspection		Level C - Continuous		
8. Verify placement of grout and prestressing grout for bonded tendons	Field Inspection		Level B - Periodic		
9. Verify size and location of structural masonry elements	Field Inspection		Level C - Continuous		
10. Verify type, size, and location of anchors, including details of anchorages of masonry	Field Inspection		Continuous		
	Field Inspection		Periodic		
	Field inspection		Level B - Periodic		

CHECKLIST OF INSPECTION	FIELD INSPECTION	FREQUENCY
11. Verify welding of reinforcement (see 1705.2.2)	Field inspection	Level C - Continuous
12. Verify preparation, construction, and protection of masonry during cold weather (temperature below 40° F) or hot weather (temperature above 90° F)	Field inspection	Continuous
13. Verify application and measurement of prestressing force	Field Inspection	Periodic
14. Verify placement of AAC masonry units and construction of thin-bed mortar joints (first 5000 SF of AAC masonry)	Field inspection	Continuous
15. Verify placement of AAC masonry units and construction of thin-bed mortar joints (after the first 5000 SF of AAC masonry)	Field inspection	Continuous
16. Verify properties of thin-bed mortar for AAC masonry (first 5000 SF of AAC masonry)	Field inspection	Level B - Periodic
17. Verify properties of thin-bed mortar for AAC masonry (after the first 5000 SF of AAC masonry)	Field inspection	Level C - Continuous
18. Prepare grout and mortar specimens	Field testing	Continuous
19. Observe preparation of prisms	Field inspection	Level B - Periodic
1705.6 Soils		Level C - Continuous
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Field inspection	Level B - Periodic
2. Verify excavations are extended to proper depth and have reached proper material.	Field inspection	Level C - Continuous

3. Perform classification and testing of controlled fill materials.	Field inspection	Periodic
4. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of compacted fill	Field inspection	Continuous
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly	Field inspection	Periodic
1705.10.3 Wind-resisting Components		
1. Roof cladding	Shop (3) and field inspection	Periodic
2. Wall cladding	Shop (3) and field inspection	Periodic
* INSPECTION AGENTS		
1.	FIRM	
2.	ADDRESS	
3.	TELEPHONE NO.	
4.		
5.		

Notes: 1. The inspection and testing agent(s) shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The qualifications of the Special Inspector(s) and/or testing agencies are subject to the approval of the Building Official and/or the Design Professional.

2. The list of Special Inspectors may be submitted as a separate document, if noted so above.

3. Special Inspections as required by Section 1704.2.5 are not required where the fabricator is approved in accordance with IBC Section 1704.2.5.2

4. Observe on a random basis, operations need not be delayed pending these inspections. Perform these tasks for each welded joint, bolted connection, or steel element.

5. NDT of welds completed in an approved fabricator's shop may be performed by that fabricator when approved by the AHJ. Refer to AISC 360, N7.

Circle "Yes" or "No" as appropriate and date this document below:

Are Requirements for Seismic Resistance included in the Statement of Special Inspections? Yes No

Are Requirements for Tornado Resistance included in the Statement of Special Inspections? Yes No

DATE: _____

**SECTION 01510
TEMPORARY FACILITIES**

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. Contractor shall furnish, install, and maintain temporary utilities required for construction and other temporary facilities as indicated; remove on completion of work.
- B. Related requirements are specified in other sections of the specifications.

1.2 REQUIREMENTS OF REGULATORY AGENCIES:

- A. Comply with National Electric Code.
- B. Comply with Federal, State, and Local codes and regulations and with utility company requirements.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEMPORARY ELECTRICITY AND LIGHTING: Provide temporary electrical service required for power and lighting, and pay all costs for service and for power used.

3.2 TEMPORARY WATER:

- A. Provide water for construction purposes; pay all costs for installation, maintenance and removal, and service charges for water used.
- B. The site is served by a municipal water system. The Contractor shall make arrangements for securing and providing necessary water as required for the performance of the work.

3.3 TEMPORARY SANITARY FACILITIES:

- A. Provide sanitary facilities in compliance with laws and regulations.
- B. Service, clean and maintain facilities and enclosures.

3.4 TEMPORARY SUPPORT FACILITIES:

- A. General: Provide reasonably neat and uniform in appearance temporary support facilities acceptable to the Engineer and the Owner.
- B. Sitting: Locate field offices, storage and fabrication sheds and other support facilities for easy access to the work. Position office so that windows give the best possible view of construction activities.
- C. Maintenance: Maintain field offices, on-site plants, storage and fabrication sheds, temporary sanitary facilities, waste collection and disposal systems, and project identification and temporary signs until near substantial project completion. Immediately prior to substantial completion remove these facilities
- D. Testing Laboratory: Furnish a building or trailer, or make suitable arrangements, at the asphalt plant(s) for performing asphalt quality assurance testing. The building or trailer shall be equipped with all necessary equipment and supplies to sample and conduct all required plant testing. The laboratory shall meet DOT and OSHA regulations.
- E. Airfield Communications:
 - 1. Contractor shall furnish his construction personnel with sufficient truck and hand-held radios to allow all construction locations to monitor Unicom Frequency at all times
 - 2. All radios will remain the property of the Contractor.
 - 3. The Contractor will not be directly compensated for providing two-way radios as this work is considered incidental to the work covered by the various contract items.
- F. Access and Haul Roads:
 - 1. Locations of access and haul roads will be approved by the Engineer. Approximate locations are shown on the drawings These roads will be located to minimize conflict with Airport operations and shall be maintained, well defined, and confined to the minimum area required. Damaged roads shall be promptly repaired by the Contractor to the satisfaction of the Engineer at no cost to the Owner.
 - 2. The Contractor shall utilize existing access and haul roads as much as possible and shall maintain the roads as required to create no dust. All project traffic must be routed through these areas. The Contractor shall provide all markings required to clearly define the access and haul roads.
 - 3. The Contractor will be responsible for obtaining any necessary driveway permit(s) from local or state agencies for access and haul roads.

4. If access or haul roads cross a utility, the Contractor shall protect the utility as directed by the Owner of the utility.
 5. There shall be no direct payment for the construction, maintenance, and removal of access and haul roads.
- G. Facilities for Night Work:
1. To perform construction activities at night, Contractor shall furnish, install and maintain temporary construction lights to illuminate night work areas during hours of darkness. The equipment used for lighting shall provide a sufficient amount of light to illuminate the work areas satisfactorily for construction and inspection. The Contractor may be required to provide additional lighting units, as directed by the Engineer. Upon completion of each nighttime operation, the lighting equipment shall be removed from the construction area and stored in the Contractor's storage area.
 2. No direct payment shall be made for this item.
- 3.5 EXECUTION, GENERAL: Maintain and operate systems to assure continuous service.
- 3.6 REMOVAL:
- A. Completely remove temporary materials and equipment when their use is no longer required.
 - B. Clean and repair damage caused by temporary installations or use of temporary facilities. Restore grassed and paved areas to their pre-construction condition.
- 3.7 MEASUREMENT AND PAYMENT: There shall be no separate measurement and payment for Temporary Facilities. All provision and removal costs shall be included in Item C-105, Mobilization.

END OF SECTION 01510

SECTION 01530
AIRFIELD TEMPORARY MARKINGS AND BARRICADES

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. Provide temporary barricade. While no runway closure is anticipated, all markers and runway number covers required for safety of aircraft and contractor's work forces are the contractor's responsibility. Maintain use of the various portions of the air operations area during construction.
- B. Comply with referenced FAA Advisory Circulars and the Construction Safety Plan.
- C. Related work specified elsewhere:
 - 1. Construction safety: General Provisions and General Requirements.
 - 2. Construction Safety Plan: Contract Drawings and General Requirements.

PART 2 - PRODUCTS

2.1 BARRICADES:

- A. If necessary and as identified on the drawing.

2.2 CLOSED RUNWAY MARKERS - NOT ANTICIPATED. Should they be necessary the following applies:

- A. Yellow color, of size shown on the drawings; constructed of exterior grade plywood and lumber, lumber and nylon mesh, or other material approved by Engineer; paint using temporary or permanent paint as noted.

2.3 RUNWAY NUMBER COVERS - NOT ANTICIPATED. Should they be necessary the following applies:

- A. Waterproof paper, opaque polyethylene film, burlap-polyethylene sheets, or other material approved by Engineer. Anchor in place with sandbags or other approved means.

2.4 PAVEMENT PAINT MARKINGS: As specified in Item P-620, if provided.

- 2.5 LIGHTED "X" UNITS - NOT ANTICIPATED. Should they be necessary the following applies:
- A. Lighted "x" units shall meet the requirements of FAA advisory circular 150/5345-55 and be Sherwin Industries (800-525-9976) portable lighted runway closure marker (RCM) or approved equal. Lighted "X" Units shall become the property of the Owner at the completion of the project.

PART 3 - EXECUTION

3.1 GENERAL:

- A. Install at locations shown on the drawings and where directed by Engineer. Anchor barricades and markers with sandbags or other methods approved by Engineer.
- B. Maintain barricades, markers, lighted "x" units, and covers (if required) until removal is directed by Engineer. The barricade flasher batteries shall be checked daily to insure that flashers are operational. Replace batteries as required.
- C. Remove barricades and markers as directed by Engineer. Repair any damage to pavement or surrounding area caused by markers or barricades.

- 3.2 MEASUREMENT AND PAYMENT: Work in this section will not be measured. All work and materials covered by this section will be paid for in the lump sum price for Mobilization, Section C-105, if provided.

END OF SECTION 01530

**SECTION 01560
TEMPORARY BARRIERS AND ENCLOSURES**

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) Section 01100, "Summary"
 - 2) Section 01143, "Airport Project Work Procedures"
 - 3) Section 01500, "Temporary Facilities and Controls"
 - 4) Item C-105, "Mobilization"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SECTION INCLUDES

- A. Temporary construction barriers, enclosures, and fencing.
 - 1) Security barriers
- B. Protection of completed Work.
- C. Removal of construction facilities and temporary controls

1.4 CODES AND REGULATIONS

- A. Building Code and Fire Regulations: Comply with requirements of fire Authorities Having Jurisdiction, including Arkansas Fire Prevention Code (APC).
- B. Safety Regulations: Comply with requirements of all applicable Federal, State and Local safety rules and regulations. The Contractor shall be solely responsible for jobsite safety.
- C. Barricades and Barriers: As required by governing Authorities Having Jurisdiction, provide temporary barriers, guardrails and enclosures around Work areas and adjacent to embankments and excavations for protection of workers and the public.

1.5 PROTECTION OF EXISTING CONDITIONS

- A. Protection of Adjacent Facilities: The Contractor shall restrict Work to limits or areas indicated on the Drawings and as specified in Section 01010 – Summary of the Work: Protect existing, adjacent facilities and existing finishes from damage, including soiling and debris accumulation.

1.6 MAINTENANCE OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- A. Maintenance: Use all means necessary to maintain temporary barriers and enclosures in proper and safe condition throughout progress of the Work, and in a condition acceptable to the owner and authorities. This shall include all life safety systems within occupied areas of the building.
- B. Replacement: In the event of loss or damage, promptly restore temporary barriers and enclosures by repair or replacement at no change in the Contract Sum or Contract Time.

1.7 TEMPORARY BARRIERS, AND ENCLOSURES

- A. Temporary Barriers, General: Provide temporary fencing, barriers and guardrails as necessary to provide for public safety, to prevent unauthorized entry to construction areas and to protect existing facilities from damage from construction operations and the elements where finished areas temporarily are exposed to the exterior or non-conditioned space.
 - 1) Note the requirements for continued occupancy and use of existing buildings and site areas (T-Hangars) during construction as outlined by the scope of work; the airfield will remain active.
 - 2) Comply with applicable local requirements and Authorities Having Jurisdiction, FAA, including industrial and construction safety regulations.
 - 3) Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities and access routes for firefighting.
 - 4) Where appropriate and necessary, provide traffic control and lighting, including flashing red or amber lights as warning devices.
- C. Tarpaulins: Fire-resistive labeled with flame-spread rating of 15 or less.
- D. Barricades, Warning Signs and Lights, General: Comply with standards and code requirements for erection of structurally adequate barricades. Paint barricades with appropriate colors, graphics and warning signs to inform personnel and the public when protecting the public and personnel against a hazard. Where appropriate and needed provide lighting, including flashing red or amber lights as warning devices.
- E. Security Closures and Lockup: Provide substantial temporary closures of openings in exterior surfaces and interior areas as appropriate to prevent unauthorized entrance, vandalism, theft and similar violations of security. Provide doors with self-closing hardware and locks, keyed to the building master keying system, and provide card reader and key pad access control and electrical locks to separate secured and non-secured areas of the Airport and AOA. Coordinate with Airport Operations for temporary tie-in's to the Airport security system and network.

- 1) Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- F. Weather Closures: Provide temporary weather-tight closures at exterior openings to prevent intrusion of water, to create acceptable working conditions, to protect completed Work and to maintain temporary heating, cooling and ventilation. Provide access doors with self-closing hardware and locks.

PART 2 – PRODUCTS

Not applicable to this Section.

PART 3 – EXECUTION

3.1 PROTECTION OF INSTALLED WORK

- A. Protection of Installed Work, General: Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. Protective Coverings: Provide protective coverings at walls, projections, jambs, sills, and soffits of openings as necessary to prevent damage from construction activities, such as coatings applications finishes new work, and as necessary to prevent other than normal atmospheric soiling.
- C. Traffic Protection:
 - 1) Protect finished floors and other surfaces from traffic, soiling, wearing and marring.
 - 2) Provide temporary covers of plywood, reinforced kraft paper or temporary rugs and mats, as necessary. Temporary covers shall not slip or tear under normal use.
 - 3) Protect newly fine graded, areas with barriers and flags to designate such areas as closed to pedestrian and vehicular traffic.

3.2 REMOVAL OF TEMPORARY BARRIERS AND ENCLOSURES

- A. Removal of Temporary Barriers and Enclosures: Unless otherwise mutually agreed by Owner or Owner's designated representative and the Contractor, remove temporary materials, equipment, services, and construction prior to Project Completion. Coordinate removal with requirements specified in Section 01500 – Temporary Facilities and Controls, and this Section 01560 – Temporary Barriers and Enclosures.
- B. Cleaning and Repairs: Clean and repair damage, soiling and marring caused to new construction by use of temporary barriers and enclosures or due to exposure to water intrusion from the exterior elements.

END OF SECTION 01560

**SECTION 01600
MATERIALS AND EQUIPMENT**

PART 1 - GENERAL

1.1 REQUIREMENTS:

- A. Material, Equipment, and Products Incorporated into the Work shall conform to applicable specifications and standards; shall comply with size, make, type and quality specified, or as specifically approved in writing by the Engineer; and shall not be used for any purpose other than that for which it is designed or is specified.
- B. Manufactured and Fabricated Products shall be designed, fabricated and assembled in accordance with the best engineering and shop practices. Like parts of duplicate units shall be manufactured to standard sizes and gages, to be interchangeable. Products shall be suitable for service conditions. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless Engineer specifically approves variations in writing.
- C. Related Requirements in Other Parts of the Project Manual: Conditions of the Contract.
- D. Standardization: Unless otherwise approved by the Engineer, items and equipment of a similar type and function shall be furnished by one manufacturer to standardize on replacement parts, service calls, operation and maintenance matters, and to avoid a division of responsibility among several manufacturers.
- E. A single supplier shall be used on principal items of equipment and systems where one or more components are not manufactured by the principal supplier; this is required to place performance and service responsibilities for the entire unit or system with only one supplier or manufacturer.

1.2 PRODUCTS SUBSTITUTIONS AND OPTIONS:

- A. Products List: Contractor shall submit a complete list of products to be incorporated into the work (with the name of the installing contractor) at the Preconstruction Conference required by these specifications.
- B. Contractor's Options:
 - 1. For products specified only by reference standard, select any product meeting that standard.
 - 2. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.

3. Airport lighting equipment covered by FAA specifications require certification under the Airport Lighting Equipment Certification Program described in Advisory Circular 150/5345-53, latest edition. Select equipment from the Certified Airport Lighting Equipment list appended to the Advisory Circular. An updated list is published biannually.

- C. Product Substitutions: Contractor shall submit, at the Preconstruction Conference, all requests for product substitutions. No requests for substitutions will be accepted from manufacturers or suppliers.

Submit a separate written request for each product, supported with complete data, with drawings and samples as appropriate, including:

1. Comparison of the qualities of the proposed substitution with that specified.
2. Changes required in other elements of the work because of the substitution.
3. Effect on the construction schedule.
4. Cost data comparing the proposed substitution with the product specified.
5. Any required license fees or royalties.
6. Availability of maintenance service, and source of replacement materials.

Engineer shall be the judge of the equality and acceptability of the proposed substitution. If Engineer determines the proposed substitute product is not "equal" to the specified product, the Contractor must provide the specified product, subject to Engineer's shop drawing review and approval.

No further requests for substitutions will be considered after Preconstruction Conference.

- D. Contractor's Representation: A request for a substitution constitutes a representation that Contractor:
1. Has investigated the proposed product and determined that it is equal to or superior in all respects to that specified.
 2. Will provide the same warranties or bonds for the substitution as for the product specified.
 3. Will coordinate the installation of an accepted substitution into the work, and make such other changes as may be required to make the work complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, which may subsequently
- E. Engineer's Review: Engineer will review requests for substitutions with reasonable promptness and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

1.3 MANUFACTURER'S INSTRUCTIONS:

- A. Printed Instructions: When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, Contractor shall obtain and distribute copies of such instructions to parties involved in the installation, including copies to Engineer. Maintain one set of complete instructions at the job site during installation and until completion and acceptance.
- B. Strict Compliance: Handle, install, connect, clean, condition, and adjust products in strict accord with such instructions and in conformity with specified requirements. Should job conditions or specified requirements conflict with manufacturer's instruction, consult with Engineer for further instructions. Do not proceed with work without clear instructions.
- C. Complete Compliance: Perform work in accord with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.4 TRANSPORTATION AND HANDLING:

- A. Deliveries: Contractor shall arrange deliveries of products in accord with construction schedules; coordinate to avoid conflict with work and conditions at the site. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible. Immediately on delivery, inspect shipments to assure compliance with requirements of contract documents and approved submittals, and that products are properly protected and undamaged.
- B. Handling: Provide equipment and personnel to handle products by methods to prevent soiling or damage of products or packaging.

1.5 STORAGE AND PROTECTION:

- A. Storage: Store products in accord with manufacturer's instructions, with seals and labels intact and legible. Store products subject to damage by the elements in weather tight enclosures. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
- B. Exterior Storage: Store fabricated products above the ground, on blocking or skids; prevent soiling or staining. Cover products, which are subject to deterioration with impervious sheet coverings; provide adequate ventilation to avoid condensation.

Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

- C. Storage Inspection: Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
- D. Protection After Installations: Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove when no longer needed.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01600

**SECTION 01600A
SUBSTITUTION REQUEST FORM**

DATE: _____

I. PROJECT NAME: _____

1. **Company Submitting Request** (name and address):

1. **Contact Name:** _____ **Phone:** _____

1. **Email:** _____

1. **SPECIFIED ITEM** (Section, Page, and Description):

1. **PROPOSED SUBSTITUTION** (Provide product name, Model, manufacturer):

1. **Differences between proposed substitution and specified product:**

I. POINT-BY-POINT COMPARATIVE DATA SHEET ATTACHED - REQUIRED BY ARCHITECT FOR THIS REQUEST:

A. Attached Data includes product description, specifications, drawings, photographs, and performance and test data, applicable portions of the data adequate for the evaluation of the request, and with applicable portions of the data clearly identified.

B. _____yes _____no changes will be required to the Contract Documents for the proper installation of proposed product substitution. If yes, then attach data that includes description of changes.

I. THE UNDERSIGNED CERTIFIES THAT THE FOLLOWING PARAGRAPHS, UNLESS MODIFIED BY ATTACHMENTS, ARE CORRECT:

C. Proposed substitution has been fully investigated and determined to be equal or superior in all respects to the specified products performance.

D. Proposed substitution does not affect the building design, engineering design, dimensions, detailing, or performance values.

E. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.

F. No maintenance is required by the proposed substitution other than that required for originally specified product.

G. Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by substitution.

SIGNATURE _____ **PRINTED NAME:** _____

I. ARCHITECT'S REVIEW AND ACTION:

A. _____ Accepted As Noted _____ Incomplete Information

1. _____ Received Too Late _____ No Substitutions accepted for this product

B. Reviewed By: _____ DATE: _____

C. Processed by Addendum No. _____

D. Comments: _____

END OF SECTION

SECTION 01 61 16
VOLATILE ORGANIC COMPOUND (VOC) CONTENT RESTRICTIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for Indoor-Emissions-Restricted products.
- B. Requirements for VOC-Content-Restricted products.
- C. Requirement for installer certification that they did not use any non-compliant products.

1.02 RELATED REQUIREMENTS

- A. Section 01 30 00 - Administrative Requirements: Submittal procedures.

1.03 DEFINITIONS

- A. Indoor-Emissions-Restricted Products: All products in the following product categories, whether specified or not:
 - 1. Interior paints and coatings applied on site.
 - 2. Interior adhesives and sealants applied on site, including flooring adhesives.
 - 3. Flooring.
 - 4. Composite wood.
 - 5. Products making up wall and ceiling assemblies.
 - 6. Thermal and acoustical insulation.
 - 7. Free-standing furniture.
 - 8. Exterior applied products (for Healthcare and Schools projects only).
- B. VOC-Content-Restricted Products: All products in the following product categories, whether specified or not:
 - 1. Interior paints and coatings applied on site.
 - 2. Interior adhesives and sealants applied on site, including flooring adhesives.
 - 3. Other products when specifically stated in the specifications.
- C. Interior of Building: Anywhere inside the exterior weather barrier.
- D. Adhesives: All gunnable, trowelable, liquid-applied, and aerosol adhesives, whether specified or not; including flooring adhesives, resilient base adhesives, and pipe jointing adhesives.
- E. Sealants: All gunnable, trowelable, and liquid-applied joint sealants and sealant primers, whether specified or not; including firestopping sealants and duct joint sealers.
- F. Inherently Non-Emitting Materials: Products composed wholly of minerals or metals, unless they include organic-based surface coatings, binders, or sealants; and specifically the following:
 - 1. Concrete.
 - 2. Clay brick.
 - 3. Metals that are plated, anodized, or powder-coated.
 - 4. Glass.
 - 5. Ceramics.
 - 6. Solid wood flooring that is unfinished and untreated.

1.04 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency current edition.
- B. ASTM D3960 - Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings 2005 (Reapproved 2018).
- C. BIFMA e3 - Furniture Sustainability Standard; Business and Institutional Furniture Manufacturers Association 2019.
- D. CAL (CDPH SM) - Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions From Indoor Sources Using Environmental Chambers 2017, v1.2.

- E. CARB (ATCM) - Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products; California Air Resources Board current edition.
- F. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board 2007.
- G. CHPS (HPPD) - High Performance Products Database Current Edition at www.chps.net/.
- H. CRI (GLP) - Green Label Plus Testing Program - Certified Products Current Edition.
- I. SCAQMD 1113 - Architectural Coatings 1977 (Amended 2016).
- J. SCAQMD 1168 - Adhesive and Sealant Applications 1989 (Amended 2017).
- K. SCS (CPD) - SCS Certified Products Current Edition.
- L. UL (GGG) - GREENGUARD Gold Certified Products Current Edition.

1.05 SUBMITTALS

- A. See Section 01300 (01 30 00) - Administrative Requirements, for submittal procedures.
- B. Product Data: For each VOC-restricted product used in the project, submit evidence of compliance.
- C. Installer Certifications Regarding Prohibited Content: Require each installer of any type of product (not just the products for which VOC restrictions are specified) to certify that either 1) no adhesives, joint sealants, paints, coatings, or composite wood or agrifiber products have been used in the installation of installer's products, or 2) that such products used comply with these requirements.

1.06 QUALITY ASSURANCE

- A. Indoor Emissions Standard and Test Method: CAL (CDPH SM), using Standard Private Office exposure scenario and the allowable concentrations specified in the method, and range of total VOC's after 14 days.
 - 1. Wet-Applied Products: State amount applied in mass per surface area.
 - 2. Paints and Coatings: Test tinted products, not just tinting bases.
 - 3. Evidence of Compliance: Acceptable types of evidence are the following;
 - a. Current UL (GGG) certification.
 - b. Current SCS (CPD) Floorscore certification.
 - c. Current SCS (CPD) Indoor Advantage Gold certification.
 - d. Current listing in CHPS (HPPD) as a low-emitting product.
 - e. Current CRI (GLP) certification.
 - f. Test report showing compliance and stating exposure scenario used.
 - 4. Product data submittal showing VOC content is NOT acceptable evidence.
 - 5. Manufacturer's certification without test report by independent agency is NOT acceptable evidence.
- B. VOC Content Test Method: 40 CFR 59, Subpart D (EPA Method 24), or ASTM D3960, unless otherwise indicated.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Report of laboratory testing performed in accordance with requirements.
 - b. Published product data showing compliance with requirements.
 - c. Certification by manufacturer that product complies with requirements.
- C. Composite Wood Emissions Standard: CARB (ATCM) for ultra-low emitting formaldehyde (ULEF) resins.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Current SCS "No Added Formaldehyde (NAF)" certification; www.scs-certified.com.
 - b. Report of laboratory testing performed in accordance with requirements.
 - c. Published product data showing compliance with requirements.
 - d. Certification by manufacturer that product complies with requirements.

- D. Furnishings Emissions Standard and Test Method: BIFMA e3 Sections 7.6.1 and 7.6.2, tested in accordance with BIFMA M7.1.
 - 1. Evidence of Compliance:
 - a. Test report showing compliance and stating exposure scenario used.
- E. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

PART 2 PRODUCTS

2.01 MATERIALS

- A. All Products: Comply with the most stringent of federal, State, and local requirements, or these specifications.
- B. Indoor-Emissions-Restricted Products: Comply with Indoor Emissions Standard and Test Method, except for:
 - 1. Composite Wood, Wood Fiber, and Wood Chip Products: Comply with Composite Wood Emissions Standard or contain no added formaldehyde resins.
 - 2. Furnishings: Comply with Furnishings Emissions Standard and Test Method.
 - 3. Inherently Non-Emitting Materials.
- C. VOC-Content-Restricted Products: VOC content not greater than required by the following:
 - 1. Adhesives, Including Flooring Adhesives: SCAQMD 1168 Rule.
 - 2. Joint Sealants: SCAQMD 1168 Rule.
 - 3. Paints and Coatings: Each color; most stringent of the following:
 - a. 40 CFR 59, Subpart D.
 - b. SCAQMD 1113 Rule.
 - c. CARB (SCM).

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

- A. Owner reserves the right to reject non-compliant products, whether installed or not, and require their removal and replacement with compliant products at no extra cost to Owner.
- B. Additional costs to restore indoor air quality due to installation of non-compliant products will be borne by Contractor.

END OF SECTION

**SECTION 01631
PLANS AND SPECIFICATIONS**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. SECTION 00 72 00 "GENERAL CONDITIONS".

1.2 GENERAL

- A. The Contract Documents, Drawings and Specifications referred to in the Bid Documents shall bear the general title of the project in a title block.
- B. The title block of the Permit Documents prepared by the Architect or Engineer of Record (A/E) shall indicate the project name, date, job number, registration number of the Architect or Engineer of Record, sheet number and the name and address of the A/E.

1.3 COPIES FURNISHED TO THE CONTRACTOR

- A. After the Notice to Proceed has been issued, the Contractor will be furnished one digital (pdf) set of the Conformed Documents and a license to reproduce the Permit Documents and Contract Documents, including the Drawings and Specifications as necessary to complete the work of this project. The cost of all reproduction under this license shall be paid for by the Contractor.
- B. The Contractor shall furnish each of the subcontractors, manufacturers, and materials suppliers such copies of the Final Conformed and Permit Documents as may be required for the work.

1.4 SUPPLEMENTARY DRAWINGS

- A. When, in the opinion of the Owner or the A/E, it becomes necessary to explain more fully the work to be done or to illustrate the work further, or to show any changes, which may be required, drawings shown as Supplementary Drawings, with specifications pertaining thereto, will be prepared and the prints thereof will be given to the Contractor.
- B. The Supplementary Drawings shall be binding upon the Contractor with the same force as the plans. Where such Supplementary Drawings require either more or less than the estimated quantities of work, credit to the Owner or compensation therefore to the Contractor shall be subject to the terms of the agreement and the appropriate change order, for the values involved, executed.

- C. The Contractor shall verify all dimensions and quantities, and details shown on the plans. Supplementary Drawings, Schedules, or other data supplied to the Contractor through the office of the A/E shall notify the A/E of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts, or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction, or improper operation resulting there from nor from rectifying such conditions at the Contractors own expense. The Contractor will not be allowed to take advantage of any error or omission, as full instructions will be furnished by the Architect, should such error or omission be discovered. All schedules are given for the convenience of the Architect and Contractor and are not guaranteed to be complete. The Contractor shall assume responsibility for the making of estimates of the size, kind, and quantity of materials and equipment included in work to be done under the contract.

1.5 CONTRACT DOCUMENTS

- A. Should the Drawings disagree in themselves or with the Specifications, the Contractor shall provide the better quality or greater quantity of work or materials unless further review of evidence by the RPR or Owner clarifies the intent.
- B. Any conflicts between drawings or specifications and codes shall be brought to the attention of the A/E in writing before installation. Specific code and paragraph shall be cited and in the case of local codes, the appropriate excerpt of code shall be included. No extra compensation will be allowed for code compliance. Where drawings and specifications indicate more stringent requirements or higher quality than code requires, the Drawings and Specifications shall prevail.
- C. The A/E shall affirm that to the best of the A/E's knowledge at the time of final design, the applicable codes and ordinances constitute all legally adopted requirements governing the work described by these Final design and Permit Documents (plans and specifications).
 - 1) That to the best of the A/E's knowledge the work described within the Final design and Permit Documents has been designed in full compliance with applicable codes and ordinances and with interpretations historically rendered by the governing agency indicated.
 - 2) That it is the responsibility of said governing authority to fully review these Drawings and Specifications for code compliance prior to permitting construction of this Work in accordance with state statutes.
 - 3) The A/E do not accept any responsibility or liability for changes in the Work required for compliance with codes and/or ordinances as a result of changes in interpretation rendered by said governing authority, either of which occurring after issuance of permit for construction of this work.

PART 2 – PRODUCTS (Refer to PART 1 above)

PART 3 – EXECUTION (Refer to PART 1 above.)

END OF SECTION 01631

**SECTION 01700
CONTRACT CLOSEOUT**

PART 1 - GENERAL

1.1 REQUIREMENTS:

- A. Comply with requirements stated in conditions of the Contract and in the Specifications for administrative procedures in closing out the work.
- B. Related requirements in other parts of the Project Manual including fiscal provisions, legal submittals and additional administrative requirements: Conditions of the contract.
- C. Related requirements specified in other sections:
 - 1. Closeout submittals required of trades: The respective sections of specifications.
 - 2. Project Record Documents: Section 01720.
 - 3. Warranties and Bonds: Section 01740.

- 1.2 SUBSTANTIAL COMPLETION: The conditions and procedures for inspection and Contractor's, Engineer's and Owner's responsibilities pertaining to substantial completion are as specified in the General Provisions and in the Supplementary Conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.1 FINAL INSPECTION: Shall be in accordance with conditions and procedures outlined in the Contract Documents. When Engineer finds that the work is acceptable under the Contract Documents, he will request required Contractor's Closeout Submittals.
- 3.2 REINSPECTION FEES: Should Engineer perform reinspections due to failure of the work to comply with the claims of status of completion made by the Contractor, the Owner will compensate Engineer for such additional services. The Owner will deduct the amount of such compensation from the final payment due the Contractor.
- 3.3 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER:
- A. Evidence of compliance with requirements of governing authorities: Certificates of Inspection.

- B. Project Record Documents: Conform to requirements of Section 01720.
 - C. Warranties and Bonds: Conform to requirements of Section 01740.
 - D. Evidence of payment and release of liens: To requirements of General Provisions and Supplementary Conditions.
 - E. Certificates of Insurance for products and completed operations.
 - F. Once the Engineer has determined the work is acceptable under the Contract Documents, he will furnish the Contractor appropriate number of copies of the following forms, copies of which are attached:
 - 1. Contractor Warranty Form
 - 2. Affidavit of Payment
 - 3. Affidavit of Release of Liens
 - 4. Final Waiver of Lien
 - 5. Consent of Surety for Final Payment
 - 6. Final DBE Participation Report (not attached)
- 3.4 PAYMENT: No separate payment will be made under this section for work described or specified herein.

END OF SECTION 01700

AFFIDAVIT OF PAYMENT

To All Whom It May Concern:

WHEREAS, the undersigned has been employed by _____ to furnish labor and materials for work, under a contract for the improvement of property described as **"2020 TAXILANE REHABILITATION"** in the **CITY** of **JONESBORO**, State of **ARKANSAS** of which **JONESBORO MUNICIPAL AIRPORT COMMISSION** is the Owner,

NOW, THEREFORE, this _____ day of _____, 20__,

The undersigned, as the Contractor for the above-named Contract pursuant to the Conditions of the Contract hereby certifies that to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services, who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS: (If none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

ATTACHMENTS:

1. Consent of Surety to Final Payment. (Whenever Surety is involved, Consent of Surety is required.)
2. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
3. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers.
4. Contractor's Affidavit of Release of Liens.

CONTRACTOR (Name of sole ownership, corporation or partnership)

(Signature of Authorized Representative)

(Affix corporate seal here)

TITLE

AFFIDAVIT OF RELEASE OF LIEN

To All Whom It May Concern:

WHEREAS, the undersigned has been employed by _____ to furnish labor and materials for work, under a contract for the improvement of property described as **"2020 TAXILANE REHABILITATION"** in the **CITY** of **JONESBORO**, State of **ARKANSAS** of which **JONESBORO MUNICIPAL AIRPORT COMMISSION** is the Owner,

NOW, THEREFORE, this _____ day of _____, 20____,

The undersigned, as the Contractor for the above-named Contract pursuant to the Conditions of the Contract hereby certifies that to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services, who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS: (If none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

ATTACHMENTS:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers.

CONTRACTOR (Name of sole ownership, corporation or partnership)

(Signature of Authorized Representative)

(Affix corporate seal here)

TITLE

FINAL WAIVER OF LIEN

To All Whom It May Concern:

WHEREAS, the undersigned has been employed by _____ to furnish labor and materials for work, under a contract for the improvement of property described as **“2020 TAXILANE REHABILITATION”** in the **CITY** of **JONESBORO**, State of **ARKANSAS** of which **JONESBORO MUNICIPAL AIRPORT COMMISSION** is the Owner,

NOW, THEREFORE, this _____ day of _____, 20__.

for and in consideration of the sum of _____ Dollars paid simultaneously herewith, the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above-described premises, and the improvements thereon, and on the monies or other considerations due to become due from the owner, on account of labor, services, material, fixtures, apparatus of machinery heretofore or which may hereafter be furnished by the undersigned to or for the above-described premises by virtue of said contract.

CONTRACTOR (Name of sole ownership, corporation or partnership)

(Signature of Authorized Representative)

(Affix corporate seal here)

TITLE

CONTRACTOR WARRANTY FORM

Project Name **“2020 TAXILANE REHABILITATION”**
Location **JONESBORO MUNICIPAL AIRPORT**
Owner **JONESBORO MUNICIPAL AIRPORT COMMISSION**

We, **CONTRACTOR**, Contractor for the above referenced project, do hereby warrant that all labor and materials furnished and work performed are in accordance with the Contract Documents and authorized modifications thereto, and will be free from defect due to defective materials or workmanship for a period of one year from Date of Substantial Completion. This warranty commences on

(Date of Substantial Completion Affixed by Engineer)

and expires on :

(One Year From Commencement Date)

This warranty covers that portion of the project described below:

Should any defect develop during the warranty period due to improper materials, workmanship or arrangement, the defect shall, upon written notice by the Owner, be made good by the Undersigned at no expense to the Owner.

Nothing in the above shall be deemed to apply to work which has been abused or neglected by the Owner.

Date

CONTRACTOR (Name of sole ownership, corporation or partnership)

(Signature of Authorized Representative)

(Affix corporate seal here)

TITLE

CONSENT OF SURETY FOR FINAL PAYMENT

Project Name “2020 TAXILANE REHABILITATION”
Location JONESBORO MUNICIPAL AIRPORT
Owner JONESBORO MUNICIPAL AIRPORT COMMISSION
Type of Contract Construction
Amount of Contract \$ _____

In accordance with the provisions of the above-named contact between the Owner and the Contractor, the following named surety:

SURETY

on the Payment Bond of the following named Contractor:

CONTRACTOR

hereby approves of final payment to the Contractor, and further agrees that said final payment to the Contractor shall not relieve the Surety Company named herein of any of its obligations to the following named Owner: as set forth in said Surety company's bond:

OWNER

IN WITNESS WHEREOF, the Surety Company has hereunto set its hand and seal this _____ day of _____, 20__.

SURETY

(Signature of Authorized Representative)

(Affix corporate seal here)

TITLE

IF SIGNED BY ATTORNEY-IN-FACT, POWER OF ATTORNEY MUST BE ATTACHED.

**SECTION 01710
CLEANING AND DISPOSAL**

PART 1 - GENERAL

- 1.1 DESCRIPTION: Contractor shall execute cleaning during progress of the work and at completion of the work as required by the General Provisions and other specification documents.
- 1.2 DISPOSAL REQUIREMENTS:
- A. Conduct cleaning and disposal operations to comply with all local, state and federal codes, ordinances, regulations, and anti-pollution laws; and with airport and construction safety requirements.
 - B. All disposals of waste materials shall be off airport property at locations approved by the Engineer.
 - C. Contractor shall be responsible for arranging for and obtaining off-site disposal areas, including payment for all costs associated with such disposal.
- 1.3 SUBMITTALS: Prior to beginning work, submit a Disposal Plan for the satisfactory disposal of all waste materials and debris.

PART 2 - PRODUCTS

- 2.1 MATERIALS:
- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
 - B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
 - C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

- 3.1 **CLEANING:** Execute periodic cleaning to keep the work, site and adjacent properties free from accumulations of waste materials, rubbish, windblown debris, and dust resulting from construction operations. Provide on-site containers for the collection of waste materials, debris and rubbish. Remove waste materials, debris and rubbish from the site periodically and dispose of at approved locations.
- 3.2 **BARRIERS AND PROTECTION:** Protect existing structures and vegetation from cleaning and disposal operations as required.
- 3.3 **DUST CONTROL:** Schedule cleaning and other operations so that dust and other contaminants resulting there from will not fall on wet or newly coated surfaces, will not damage or contaminate aircraft, and will not unduly affect the work of other airport tenants.
- 3.4 **DISPOSAL OF DEBRIS AND WASTE MATERIALS:**
- A. If permitted by Owner and local, state and federal regulations, Contractor may dispose of combustible materials on-site by burning. Unguarded fires will not be permitted. Burning will be restricted as follows:
 - 1. Burning of poison oak, poison ivy or other plants of similar nature will be prohibited.
 - 2. Tires or other combustible waste material shall not be used to augment burning.
 - 3. Burning operations that may in any way be hazardous to air operations will not be allowed.
 - B. Non-combustible and waste materials and ashes shall be removed from the site and disposed of in accordance with the Disposal Plan.
- 3.5 **PAYMENT:** No separate payment will be made under this section for work described or specified herein.

END OF SECTION 01710

**SECTION 01720
PROJECT RECORD DOCUMENTS**

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS:

- A. Contractor shall maintain at the site as specified herein for the Owner one record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change orders and other modifications.
 - 5. Engineer field orders or written instructions.
 - 6. Approved shop drawings, product data and samples.
 - 7. Field test records.
 - 8. Laboratory test records.

- B. Related requirements in other parts of the Project Manual: Conditions of the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 MAINTENANCE OF DOCUMENTS AND SAMPLES:

- A. Store record documents and samples in Contractor's field office apart from documents used for construction.

- B. File documents and samples in accordance with data filing format of the Construction Specifications Institute - MASTERFORMAT.

- C. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.

- D. Make documents and samples available at all times for inspection by Engineer.

3.2 RECORDING:

- A. Stamp or label each document "PROJECT RECORDS" in 3/4-inch letters.

- B. During daily progress of the work, the job superintendent for the Contractor shall record information concurrently with construction progress.

Do not conceal any work until required information is recorded.

- C. Drawings: Legibly mark to record actual construction in color codes designated by the Engineer.

- D. All field data for record information shall be obtained by a surveyor who is a Registered Land Surveyor (RLS) in the state of Arkansas. All field notes to determine the "as-built" conditions shall be sealed by the RLS who performed the survey and shall be submitted to the Engineer.

- E. Record Information includes but is not limited to the following:

1. Depths of various elements of foundation in relation to finish reference datum.
2. Horizontal and vertical locations of pavements and underground utilities and appurtenances, referenced to permanent surface improvements or finish reference datum.
3. Field changes of dimension and detail.
4. Changes made by field order or by change order.
5. Details not on original contract drawings.
6. Extent and dimensions of pavement removal.
7. Any other changes in the plans.
8. Storm drainage system construction:
 - a. Exact distance between all catch basins, manholes, points of intersection, and line terminals or headwalls.
 - b. The invert elevation of the end of all pipes, stub outs, and headwalls.
 - c. The rim (top of frame) or top of grate and invert elevations of all manholes, catch basins, and other structures.
9. Electrical construction identification:
 - a. Exact distance between all manholes and points of intersection.
 - b. Exact size and location of duct bank or cable run and what circuits it feeds.
 - c. Exact location of any lines abandoned in place.
 - d. Exact location, type, and size of runway and taxiway edge lights, centerline lights, and/or touchdown zone lights.
 - e. Rim and invert elevation of all manholes and duct banks.
 - f. Depth of cover on direct burial lines.
 - g. Locations of cable splices.
 - h. Location and description of signs.

- F. Specifications and addenda: Legibly mark each section to record:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
2. Changes made by field order or by change order.

- G. All horizontal control dimensions shall be to the nearest tenth of a foot. Elevations shall be to the nearest one-hundredth of a foot.

3.3 SUBMITTAL:

- A. At the close of the job and prior to receipt of final payment, the Contractor shall deliver to the Engineer for the Owner one complete set of Record Documents.
- B. Accompany submittal with transmittal letter containing:
 - 1. Date.
 - 2. Project title and number.
 - 3. Contractor's name and address.
 - 4. Title and number of each record document.
 - 5. Signature of Contractor or his authorized representative.

- 3.4 PAYMENT: No separate payment will be made under this section for work described or specified herein. The cost of this work shall be considered incidental to and included in other items of work.

END OF SECTION 01720

**SECTION 01740
WARRANTIES AND BONDS**

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS:

- A. Contractor shall:
 - 1. Compile specified warranties and bonds.
 - 2. Compile specified service and maintenance contracts.
 - 3. Co-execute submittals to verify compliance with Contract Documents.
 - 4. Review submittals to verify compliance with Contract Documents.
 - 5. Submit to Engineer for review and transmittal to Owner.

- B. Related requirements in other parts of the Project Manual:
 - 1. Bid Bonds: Instructions to bidders.
 - 2. Performance Bond and Payment Bond: Conditions of the contract.
 - 3. General warranty of construction: Conditions of the contract.

- C. Related requirements specified in other sections:
 - 1. Warranties and Bonds required for specific products: Each respective section of specifications.
 - 2. Provisions and duration of Warranties and Bonds: The respective section of specifications, which specifies the product.
 - 3. Contract closeout: Section 01700
 - 4. Equipment Manuals: Section 01300

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SUBMITTAL REQUIREMENTS:

- A. Assemble warranties, bonds, and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.

- B. Number of original signed copies required: Two (2) each.

- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address and telephone number.
 - 3. Scope.
 - 4. Date of beginning of warranty, bond, or service and maintenance contract.

5. Duration of warranty, bond, or service and maintenance contract.
6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances, which might affect the validity of warranty or bond.
7. Contractor, name of responsible principal, address and telephone number.

3.2 FORM OF SUBMITTALS:

- A. Prepare in duplicate packets.
- B. Format:
 1. Size 8 1/2 inches x 11 inches. Punch sheets for 3-ring binder. Fold larger sheets to fit into binders.
 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
 - a. Project title and number.
 - b. Owner's name.
 - c. Contractor's name and address.
- C. Binders: Commercial quality, 3-ring, with durable and cleanable plastic covers.

3.3 TIME OF SUBMITTALS:

- A. Submit within ten (10) days after date of substantial completion, and prior to final request for payment.
- B. For items of work where acceptance is delayed materially beyond the date of substantial completion, provide updated submittal within ten (10) days after acceptance, listing the date of acceptance as the start of the warranty period.

3.4 SUBMITTALS REQUIRED: Submit warranties, bonds, and service and maintenance contracts as specified in the respective sections of specifications.

3.5 PAYMENT: No separate payment will be made under this section for work described or specified herein.

END OF SECTION 01740

**SECTION 01770
CLOSEOUT PROCEDURES**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 30, "Award and Execution of Contract"
 - 2) General Provision Section 40, "Scope of Work"
 - 3) General Provision Section 50, "Control of Work"
 - 4) Section 00 72 00, "General Conditions"
 - 5) General Provision Section 80, "Execution and Progress"
 - 6) General Provision Section 90, "Measurement and Payment"
 - 7) Section 01290, "Payment Procedures"
 - 8) Section 01322, "Photographic Documentation"
 - 9) Section 01700, "Execution Requirements"
 - 10) Section 01781, "Project Record Documents"
 - 11) Section 01782, "Operation and Maintenance Data"
 - 12) Section 01820, "Demonstration and Training"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1) Inspection procedures.
 - 2) Warranties.
 - 3) Final cleaning.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1) Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2) Advise Owner of pending insurance changeover requirements.
 - 3) Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.

- 4) Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
- 5) Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
- 6) Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
- 7) Complete startup testing of systems.
- 8) Submit test/adjust/balance records.
- 9) Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- 10) Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- 11) Complete final cleaning requirements, including touchup painting.
- 12) Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, A/E and the Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. A/E and the Owner will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by A/E and the Owner, that must be completed or corrected before certificate will be issued.

- 1) Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
- 2) Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

- 1) Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
- 2) Submit certified copy of A/E's and the Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by A/E. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
- 3) Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- 4) Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.

- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, A/E and the Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. A/E will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1) Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three (3) copies of Contractor's list and one excel file. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1) Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 - 2) Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3) Include the following information at the top of each page:
 - a. Project name.
 - b. Project identifying numbers.
 - c. Date.
 - d. Name of Architect/Engineer.
 - e. Name of Contractor.
 - f. Page number.

1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of A/E and Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1) Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2) Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3) Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

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

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1) Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - f. Sweep concrete floors broom clean in unoccupied spaces.
 - g. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - h. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - i. Remove labels that are not permanent.

- j. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - k. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - l. Replace parts subject to unusual operating conditions.
 - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - n. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - o. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01770

**SECTION 01782
OPERATION AND MAINTENANCE DATA**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Provisions and other Division 1 Specification Sections, apply to this Section.
- B. Related Sections include the following:
 - 1) General Provision Section 40, "Scope of Work"
 - 2) General Provision Section 50, "Control of Work"
 - 3) Section 00 72 00, "General Conditions"
 - 4) General Provision Section 80, "Execution and Progress"
 - 5) General Provision Section 90, "Measurement and Payment"
 - 6) Section 01740, "Warranties and Bonds"
 - 7) Section 01770, "Closeout Procedures"
 - 8) Section 01781, "Project Record Documents"
- C. If there is a discrepancy between the requirements of this section and related sections, the more restrictive interpretation shall apply.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1) Operation and maintenance documentation directory.
 - 2) Emergency manuals.
 - 3) Operation manuals for systems, subsystems, and equipment.
 - 4) Maintenance manuals for the care and maintenance of materials, systems and equipment.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 SUBMITTALS

- A. Initial Submittal: Submit two (2) draft copies of each manual at least fifteen (15) days before requesting inspection for Substantial Completion. Include a complete operation and

maintenance directory. Architect and Owner will return one (1) copy of draft and mark whether general scope and content of manual are acceptable.

- B. Final Submittal: Submit one (1) copy of each manual in final form at least fifteen (15) days before final inspection. Architect and Owner will return copy with comments within fifteen (15) days after final inspection.
- 1) Correct or modify each manual to comply with Architect's and Owner's comments. Submit **three (3)** copies of each corrected manual within fifteen (15) days of receipt of Architect's and Owner's comments.
 - 2) Provide searchable CD (or thumb drive) with all operation and maintenance data, in addition to the paper copy, date and label CD's (or thumb drives) 1 of 5, 2 of 5, 3 of 5, etc., if multiple CDs are needed. Provide a table of contents with description of the documents on the CD (or thumb drive).

1.5 COORDINATION

- A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
- 1) List of documents.
 - 2) List of systems.
 - 3) List of equipment.
 - 4) Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with the same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
- 1) Title page.
 - 2) Table of contents.
 - 3) Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
- 1) Subject matter included in manual.
 - 2) Name and address of Project.
 - 3) Name and address of Owner.
 - 4) Date of submittal.
 - 5) Name, address, and telephone number of Contractor.
 - 6) Name and address of Architect.
 - 7) Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- 1) If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- 1) Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2) Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.

- 3) Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
- 4) Supplementary Text: Prepared on 8-1/2-by-11-inch, 20-lb/sq. ft. white bond paper.
- 5) Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
 - 1) Type of emergency.
 - 2) Emergency instructions.
 - 3) Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
 - 1) Fire.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
 - 1) Instructions on stopping.
 - 2) Shutdown instructions for each type of emergency.
 - 3) Operating instructions for conditions outside normal operating limits.
 - 4) Required sequences for electric or electronic systems.
 - 5) Special operating instructions and procedures.

2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and any further information necessary.
- B. Descriptions: Include the following:
 - 1) Product name and model number.
 - 2) Manufacturer's name.
 - 3) Equipment identification with serial number of each component.
 - 4) Equipment function.

- 5) Operating characteristics.
- 6) Limiting conditions.
- 7) Performance curves.
- 8) Engineering data and tests.
- 9) Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include the following, as applicable:

- 1) Startup procedures.
- 2) Equipment or system break-in procedures.
- 3) Routine and normal operating instructions.
- 4) Regulation and control procedures.
- 5) Instructions on stopping.
- 6) Normal shutdown instructions.
- 7) Seasonal and weekend operating instructions.
- 8) Required sequences for electric or electronic systems.
- 9) Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.5 PRODUCT MAINTENANCE MANUAL

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in manual identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Product Information: Include the following, as applicable:

- 1) Product name and model number.
- 2) Manufacturer's name.
- 3) Color, pattern, and texture.
- 4) Material and chemical composition.
- 5) Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

- 1) Inspection procedures.
- 2) Types of cleaning agents to be used and methods of cleaning.
- 3) List of cleaning agents and methods of cleaning detrimental to product.
- 4) Schedule for routine cleaning and maintenance.

5) Repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1) Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information: List each system, subsystem, and piece of equipment included in the manual identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:

- 1) Standard printed maintenance instructions and bulletins.
- 2) Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
- 3) Identification and nomenclature of parts and components.
- 4) List of items recommended to be stocked as spare parts.

D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

- 1) Test and inspection instructions.
- 2) Troubleshooting guide.
- 3) Precautions against improper maintenance.
- 4) Disassembly; component removal, repair, and replacement; and reassembly instructions.
- 5) Aligning, adjusting, and checking instructions.

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

1) Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.

- 2) Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
- 1) Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
- 1) Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2) Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
- 1) Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.

- 1) Do not use original Project Record Documents as part of operation and maintenance manuals.
- F. Comply with Division 1 Section "Closeout Procedures" for the schedule for submitting operation and maintenance documentation.

END OF SECTION 01782

**SECTION 01820
DEMONSTRATION AND TRAINING**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1) Demonstration of operation of systems, subsystems, and equipment.
 - 2) Training in operation and maintenance of systems, subsystems, and equipment.
 - 3) Demonstration and training videos. (narrated)

1.3 SUBMITTALS

- A. Instruction Program: Submit two copies of outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include three (3) learning objectives and outline for each training module.
 - 1) At completion of training, submit three (3) complete training manuals for Owner's use.
- B. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- C. Attendance Record: For each training module, submit list of participants and length of instruction time.
- D. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.
- E. Demonstration and Training Videos: Submit two copies within fifteen (15) days of end of each training module.
 - 1) Identification: On each copy, provide an applied label with the following information:
 - a. Name of Project.
 - b. Project identifying numbers.
 - c. Name and address of video producer.
 - d. Name of Architect.

- e. Name of Contractor.
- f. Date videotape was recorded.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Division 1 Section "Quality Requirements," experienced in operation and maintenance procedures and training.

1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by the Architect and the Owner.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Provide all necessary training for equipment installed.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Organize and facilitate client/contractor meeting(s) to provide necessary training. Invitation shall be extended to A/E.

3.2 INSTRUCTION

- A. Engage qualified instructor(s) to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1) Owner will furnish Contractor with names and positions of participants.

- B. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1) Schedule training with Owner, through RPR OR A/E, with at least 21 days' advance notice.

END OF SECTION 01820

