

# **Savannah Airport Commission**

# <u>Southeast Quadrant</u> <u>Stormwater Drainage Improvements</u>

SAC Job ID 30596 March 2021

Bidding & Contract Documents General Contract Provisions General Construction Items Supplementary General Conditions Technical Specifications Drawings

# Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

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(198 FOR DRAWING SET)

# **NOTICE TO BIDDERS**

Sealed proposals will be received by the Savannah Airport Commission in the office of the Savannah Airport Commission Engineering Department, 400 Airways Avenue, Third Floor, Savannah, Georgia 31408 until **April 20<sup>th</sup>, 2021 at 1:30pm EST**, at which time and place all proposals received will be opened and read aloud virtually. Proposals submitted after this date and time shall be considered non-responsive.

Bidders are invited to submit proposals for:

# Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

Bidders are invited to submit proposals for this work on the proposal forms provided. Other proposal forms will not be accepted.

The complete examination and understanding of the construction plans, specifications, contract documents and site of the proposed work is necessary to properly submit a proposal. Construction plans, specifications and contract documents are available for examination and may be obtained from the offices of the Savannah Airport Commission, 400 Airways Avenue, Savannah International Airport, Savannah, Georgia 31408, Phone (912) 964-0514, for a cost of \$25.00 USD per digital copy. This cost is non-refundable. Please make checks payable to Savannah Airport Commission. For credit card payments, use extension 3313 and reference SAC Job ID 30596.

A pre-bid conference for bidders will be conducted via telecon on **Tuesday**, **April 6<sup>th</sup>**, **2021 at 1:30pm EST**. Pre-bid conference access information is as follows:

Dial-in number (US): (605) 468-8763 Access code: 833378# International dial-in numbers: <u>https://fccdl.in/i/jsmith8030</u> Online meeting ID: jsmith8030 Join the online meeting: <u>https://join.freeconferencecall.com/jsmith8030</u>

A Bid Bond in the form as bound in the contract documents or certified check in the amount of not less than five percent (5%) of the total amount bid must accompany each bid.

Successful bidder will be required to execute and to provide a Payment Bond and Performance Bond each in an amount of one hundred percent (100%) of the total value of the contract awarded to him with a satisfactory surety or sureties for the full and faithful performance of the work. If the total value of the contract is less than \$100,000.00, a Payment Bond or Performance Bond may not be required. This Project is a Federal Aid Project under the provisions of the Airport and Airways Safety and Capacity Expansion Act of 1987. Certain mandatory Federal requirements are included in the Contract Documents. **The Bidder's attention is also invited to the General Provisions, Section 130 – REQUIRED CONTRACT PROVISIONS FOR AIRPORT IMPROVEMENT PROGRAM AND FOR OBLIGATED SPONSORS** pertaining to Federal requirements regarding labor provisions, minimum wage rates, Equal Employment Opportunity (EEO) and Disadvantaged Business Enterprise (DBE) requirements.

The Savannah Airport Commission, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that, in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded equal opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

It is the policy of the Savannah Airport Commission that Disadvantaged Business Enterprises (DBEs) as defined in 49 CFR Part 26 shall have an equal opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds. Consequently, the DBE requirements of 49 CFR Part 26 apply to this Contract.

The Contractor agrees to ensure that Disadvantaged Business Enterprises that are presumed to be socially and economically disadvantaged as defined in 49 CFR Part 26 have an equal opportunity to participate in the performance of this contract. In this regard all Contractors shall take all necessary and reasonable steps to ensure that such Disadvantaged Business Enterprises have an equal opportunity to compete for and perform contracts. Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award or performance of FAA assisted contracts.

By submitting a Bid under this Solicitation, except for those items listed by the offeror on a separate and clearly identified attachment to the Bid, the offeror certifies that steel and each manufactured product is produced in the United States (as defined in the clause Buy America - Steel and Manufactured Products for Construction Contract) and that components of unknown origin are considered to have been produced or manufactured outside the United States.

The Contractor, or any subcontractor, submitting a bid for utility contracting, as defined in O.C.G.A. Section 43-14-2 to a utility system as defined in said section, shall conform to O.C.G.A. Section 43-14-8.2 et seq. with reference to Utility Contractor's Licenses. Utility contracting means a proposal to perform utility work to a utility system as defined in O.C.G.A. Section 43-14-2(17).

No bid may be withdrawn after closing time for the receipt of proposals for a period of ninety (90) days.

This is a bid for construction and therefore the City's local vendor preference ordinance will not apply.

The Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission reserve the right to waive any informalities, irregularities, and/or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

#### **INSTRUCTIONS TO BIDDERS**

#### I. <u>GENERAL</u>

- A. This Project is to be financed in part by a grant from the United States under the Airport and Airway Safety and Capacity Act of 1987, FAA AIP Project No. 3-13-0100-TBD-2020. The award of a Contract is subject to the approval of the Federal Aviation Administration.
- B. <u>Licenses</u>. The successful Bidder must be a licensed Contractor as required by the Georgia State Licensing Board and will be required to obtain any and all necessary licenses or permits to conduct the work as may be prescribed by the State of Georgia and by the City of Savannah.
- C. Testing Lab Accreditation. All federally funded construction projects costing \$250,000 and more require that the testing laboratory be accredited in accordance with AC 150/5370-10H, dated December 21<sup>st</sup>, 2018.
- D. <u>Examination of Conditions Affecting Work</u>. Prior to submitting a Proposal, each Bidder shall examine and thoroughly familiarize himself with all existing conditions including all applicable laws, codes, ordinances, rules and regulations that will affect his work. Bidders shall visit the site, examine the grounds and all existing buildings, utilities, and roads, and shall ascertain by any reasonable means all conditions that will in any manner affect the work. The drawings have been prepared on the basis of surveys and inspections of the site and represent an essentially accurate indication of the physical conditions at the site. This, however, shall not relieve the Bidders of ascertaining for themselves the conditions or expected site conditions for construction of the project. The Owner will not be responsible for any unforeseen conditions of the site encountered during construction.
- E. <u>Nondiscrimination and Segregated Facilities</u>
  - 1. Bidders must comply with the President's Executive Order No. 11246, amended by 13672 on July 21, 2014, which prohibits discrimination in employment regarding race, creed, color, sex or national origin.
  - 2. Each Bidder shall complete, sign and include in his Bid Proposal the Equal Opportunity Report Statement. When a determination has been made to award a Contract to a specific Contractor, such Contractor shall, prior to award, after award or both, furnish such other pertinent information regarding his own employment policies and practices as well as those of his proposed subcontractors as the FAA, or the Secretary of Labor, the City of Savannah or the Savannah Airport Commission may require. All such information required of a subcontractor shall be furnished by the Contractor.
  - 3. The Equal Opportunity Report Statement, Certification of Non-segregated Facilities, Equal Opportunity Clause, and all other EEO requirements shall be included in all non-exempt subcontracts entered into by the Contractor. Subcontracts entered into by the Contractor shall also include all other applicable labor provisions. No subcontract shall be awarded to a non-complying subcontractor.

- 4. In addition, the Contractor will also insert in each of his subcontracts a clause requiring the subcontractor to include these provisions in any lower tier subcontracts that may in turn be made.
- F. <u>Compliance with Law</u>
  - 1. Bidders must comply with Title IV of the Civil Rights Act of 1964, the Davis-Bacon Act, the Anti-Kickback Act and the Contract Work Hours Standard Act.
  - 2. Bidders shall comply with all state laws and local ordinances, except that any preferential consideration of local in-state bidders is not allowed.
  - 3. Employment Eligibility Verification

Pursuant to the "Georgia Security and Immigration Compliance Act of 2006," O.C.G.A. Section 13-10-91, public employers and their contractors and subcontractors are required to verify the work eligibility of all newly hired employees through an electronic federal work authorization program. The Georgia Department of Labor has added a new Chapter 300-10-1, entitled "Public Employers, Their Contractors and Subcontractors Required to Verify New Employee Work Eligibility Through a Federal Work Authorization Program," to the Rules and Regulations of the State of Georgia.

(See website: http://www.dol.state.ga.us/pdf/rules/300 10 1.pdf.)

The new rules designate the "Employment Eligibility Verification (EEV) Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security as the electronic federal work authorization program to be utilized for these purposes. The EEV/Basic Pilot Program can be accessed at: <u>https://www.vis-dhs.com/EmployerRegistration</u>.

Bidders shall comply with this new rule, and submit with their bid the form titled, "Contractor Affidavit and Agreement", page I-2(a). After the contract has been awarded, the Contractor shall secure from all subcontractors the form titled "Subcontractor Affidavit and Agreement", page I-2(b), which must be submitted to the Savannah Airport Commission prior to the subcontractor beginning work at the site.

#### CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Savannah Airport Commission has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the Savannah Airport Commission, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Savannah Airport Commission the time the subcontractor(s) is retained to perform such service.

Company Name	EEV/Basic Pilot Program* User Identification No.		
Signature: Authorized Officer or Agent	Date		
Printed Name of Authorized Officer or Agent	Title of Authorized Officer or Agent of Contractor		
SUBSCRIBED AND SWORN BEFORE ME			
ON THIS THE DAY OF			

Notary Public:

(Notary Seal)

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

\* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

#### SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with \_\_\_\_\_\_\_ on behalf of the Savannah Airport Commission has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

Company Name	EEV/Basic Pilot Program* User Identification No.
Signature: Authorized Officer or Agent	Date
Printed Name of Authorized Officer or Agent	Title of Authorized Officer or Agent of Contractor

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_,

Notary Public:

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

(Notary Seal)

\* As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

AIP – SAC 30596 - INSTRUCTIONS TO BIDDERS

#### G. General Bond Requirements

- 1. The Bid Bond shall be five percent (5%) of the total amount of the bid. Only the Bid Bond as bound within these documents or a Certified Check is acceptable. **No other form will be accepted**.
- 2. Payment Bond and Performance Bond shall be one hundred percent (100%) of the total value of the contract. Only the Payment and Performance Bond as bound within and made a part of the specifications and these documents are acceptable. **No other form will be accepted.** If the total value of the contract is less than \$100,000.00, a Payment bond or Performance Bond may not be required.
- 3. The Bid Bond, Payment Bond, and Performance Bond and Bond Affidavit shall be countersigned by a Georgia Resident Agent. The Georgia Resident Agent shall furnish their Georgia License Number in the space provided.
- H. <u>Insurance Requirements</u>
  - 1. Insurance requirements shall be as specified in the SUPPLEMENTARY GENERAL CONDITIONS.

#### II. PREPARATION AND SUBMISSION OF PROPOSALS

- A. Sealed proposals for the construction of the project will be received until 1:30 PM EST on Tuesday, April 20<sup>th</sup>, 2021.
- B. The Proposal shall be on the "Proposal Form" provided; no other forms are acceptable.
- C. Each Bidder shall present his Proposal in a sealed opaque envelope and marked at the lower left hand corner Proposal for Airport Improvements, "Southeast Quadrant Stormwater Drainage Improvements," Savannah/Hilton Head International Airport, FAA AIP Project No. 3-13-0100-TBD-2020, SAC 30596" with the name of the bidder.

Proposals shall be delivered to the office of the Savannah Airport Commission Engineering Department, 400 Airways Avenue, Third Floor, Savannah, Georgia 31408.

- D. The Bidder's envelope shall contain the signed original and one complete copy of the following documents:
  - 1. Bidder's Checklist
  - 2. Proposal Form
  - 2. Bid Schedule
  - 3. Bid Bond or Certified Check
  - 4. Equal Employment Opportunity Statement
  - 5. Disadvantaged Business Enterprise Requirements
  - 6. Disadvantaged Business Enterprise Assurance
  - 7. Certificate of Non-Segregated Facilities
  - 8. Certificates of Buy American Compliance
  - 9. Bidder Qualification Questionnaire
  - 10. DBE Subcontractor List
  - 11. DBE Notification of Intent to Subcontract

- E. Proposals shall be submitted as indicated by the "Proposal Form" and shall be signed in ink by an official of the firm submitting the proposal.
- F. Erasures or other changes in a Proposal shall be explained or noted over the signature of the Bidder.
- G. Proposals containing reservations, conditions, omissions, unexplained erasures or alterations, items not required in the Bid, or irregularities of any kind, may be rejected by the Owner as being incomplete and not qualified for consideration.
- H. Each proposal shall indicate the full business name and address of the Bidder and shall be signed by him with the usual signature.
- I. A Proposal submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the members of the partnership.
- J. A Proposal submitted by a Corporation shall be signed by the legal name of the Corporation, followed by the state of incorporation and the title designation of the Corporation in legal matters. The name of each person signing the proposal shall be typed or printed below the signature.
- K. A Power of Attorney or other satisfactory evidence of the authority of the officer signing on behalf of the Corporation shall be furnished for the Owner's records.
- L. The Proposal must be accompanied by a Bid Bond executed on the form provided or a Certified Check payable to the Savannah Airport Commission in an amount equal to not less than five percent (5%) of the bid. If a bidder is awarded the Contract, but fails, refuses, or neglects to execute the Contract or to furnish the required Payment and Performance Bonds within ten (10) days after receipt of written Notice of Award, then the amount of this Bond or check shall be paid to, or retained by, the Owner as liquidated damages, although not as a penalty.
- M. Acknowledgment of receipt of all Addenda shall be made by each Bidder in the space provided in the Proposal Form.
- N. The Bidder is required to fill in all the blank spaces on the Proposal and Bid Schedule.

# III. <u>INTERPRETATIONS</u>

- A. Each Bidder shall carefully examine the Contract Documents consisting of the Plans and Specifications, and all addenda or other revisions and thoroughly familiarize himself with the detailed requirements prior to submitting a Proposal. Should a Bidder find discrepancies or ambiguities in, or omission from Contract Documents, or should he be in doubt as to their meaning, he shall at once and, in any event not later than ten (10) days prior to bid date, notify the Savannah Airport Commission who will send written addenda to all Bidders. The Savannah Airport Commission will not be responsible for any oral instructions. All addenda sent to Bidders will become a part of the Contract Documents.
- B. All inquiries shall be directed, in writing, to the Engineering Department, Savannah Airport Commission, Savannah/Hilton Head International Airport, 400 Airways Avenue, Savannah,

Georgia 31408, Telephone Number (912) 964-0514, Email: jsmith@flySAV.com. No allowance will be made after Bids are received for oversight by Bidder.

C. Where a discrepancy occurs between the prices quoted in words and/or in numbers, the unit price written in words shall govern the final costs or award of Contract.

#### IV. MODIFICATIONS AND/OR WITHDRAWALS OF PROPOSALS

- A. A bid may not be modified, withdrawn, or canceled by the Bidder during a ninety (90) calendar day period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting his bid.
- B. Negligence on the part of the Bidder in the preparation of his Proposal shall not be grounds for the modification or withdrawal of a Proposal after the time set for Bid opening.

#### V. ACCEPTANCE/REJECTION OF BIDS

- A. This is a bid for construction and therefore the City's local vendor preference ordinance will not apply.
- B. The Contractor, or any subcontractor, submitting a bid for utility contracting, as defined in O.C.G.A. Section 43-14-2 to a utility system as defined in said section, shall conform to O.C.G.A. Section 43-14-8.2 et seq. with reference to Utility Contractor's Licenses. Utility contracting means a proposal to perform utility work to a utility system as defined in O.C.G.A. Section 43-14-2(17).
- C. The Owner proposes to award the Contract to the lowest qualified Bidder, Prospective Contractor or Contractor submitting a reasonable Bid provided the Bidder, Prospective Contractor or Contractor has met the goals for DBE participation or, if failing to meet the goals, the Bidder, Prospective Contractor or Contractor has documented an acceptable goodfaith effort to meet the established goals for the DBE participation. The Bidder, Prospective Contractor or Contractor is advised that the Owner has sole authority to determine if the Bidder, Prospective Contractor or Contractor has made an acceptable good effort toward meeting DBE goals to qualify for Contract award. The Owner has the right to reject any and all bids submitted.
- D. The Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission reserve the right to waive any informalities, irregularities, or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

# END OF INSTRUCTIONS TO BIDDERS

#### **BIDDER'S CHECKLIST**

THIS CHECKLIST <u>MUST</u> BE ATTACHED AS THE COVER SHEET TO YOUR BID PRIOR TO SEALING YOUR BID AND SUBMITTING IT TO THE OFFICE OF THE PURCHASING DIRECTOR. IF THIS CHECKLIST IS NOT ATTACHED, YOUR BID WILL BE DISQUALIFIED. IF THIS CHECKLIST IS INCOMPLETE OR IF ANY ITEM CANNOT BE VERIFIED AS BEING INCLUDED WITH YOUR BID, YOUR BID WILL BE DISQUALIFIED.

NAME OF BIDDER:	
ADDRESS (STREET, UNIT):	
ADDRESS (CITY, STATE, ZIP):	
PHONE NUMBER:	
EMAIL ADDRESS:	

#### **INSTRUCTIONS TO BIDDERS**

The contents of your bid package must be clearly marked and submitted <u>IN THE FOLLOWING ORDER</u>: 1) acknowledgement of addendum, 2) bid bond, 3) the bid proposal page, 4) DBE goals, 5) DBE good faith efforts, and 6) Total amount of bid. Please place a check mark in the appropriate space and indicate the number of addendums received:

1) Addendum received?	Yes 🗆	No 🗆
Indicate number of addendums	received:	
2) Bid Bond enclosed?	Yes 🗆	No 🗆
Form of bid bond: Surety Bond:  Cashier's Check:	Certified C	heck: 🗆
3) Are all signature pages of the bid proposal signed?	Yes 🗆	No 🗆
4) DBE contract goal will be met:	Yes 🗆	No 🗆
5) DBE contract goal will not be met; but a documented Good Faith Effort is attached:	Yes 🗆	No 🗆
6) Total Amount of Bid: \$		

# IF THE FOLLOWING DOCUMENTS ARE NOT COMPLETED AND ENCLOSED WITH THE BID PACKAGE, THE BID MAY BE DISQUALIFIED. CHECK APPROPRIATE SPACE:

1.	Bidder's Checklist		Yes 🗆	No □
2.	Proposal Form		Yes 🗆	No □
3.	Bid Schedule		Yes 🗆	No □
4.	Bid Bond or Certified Check		Yes 🗆	No □
5.	Equal Employment Opportunity Statement		Yes 🗆	No □
6.	Disadvantaged Business Enterprise Requirements		Yes 🗆	No □
7.	Disadvantaged Business Enterprise Assurance Form		Yes 🗆	No □
8.	DBE Subcontractor List		Yes 🗆	No □
9.	DBE Notification of Intent to Subcontract (Within 5-days after notice to subcontract)		Yes 🗆	No □
10.	Certificate of Non-Segregated Facilities		Yes 🗆	No □
11.	Bidder Qualification Questionnaire		Yes 🗆	No □
Ce	rtified By:			
	(Name)	(Title)		
	(Signature)			
~~	FOR COMMISSIO		~~~~~~~	
<u>Ve</u>	prification of Bid Package Content:			
1)	Addendum Received:		Yes 🗆	No 🗆
	Indicate number of add	endums received:		
2)	Bid Bond Enclosed:		Yes 🗆	No 🗆
	Form of bid bond: Surety Bond: $\Box$ C	ashier's Check: 🗆	Certified C	Check: 🗆
3)	Bid Proposal Pages Signed:		Yes 🗆	No 🗆
	ertify that the above items were/were not included w l opening.	vith the attached bic	l at the time	and place of the
(Si	gnature)		(Date)	

(Title)

# **PROPOSAL FORM**

DATE:		
TO:	Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission	
FROM:	Bidder's Name	
	Address	
	City, State and Zip Code	

A. The undersigned, as Bidder, does hereby declare that he has familiarized himself with the local conditions affecting the cost of the work, the Contract Documents including the "Notice to Bidders", "Instructions to Bidders", "Proposal", "Bid Schedule", "General Provisions", "Supplementary General Conditions", and the specifications and drawings and other related construction documents, together with any addenda to such construction documents as listed herein (paragraph M) and hereby proposes to furnish all material and perform all work required in strict accordance with the provisions of documents noted above for the consideration of prices quoted in the "Bid Schedule."

E-mail Address

- above for the consideration of prices quoted in the "Bid Schedule."B. The undersigned understands that the quantities shown in the Bid Schedule are approximate only, are intended principally to serve as a guide in evaluating Proposals and
- C. The undersigned affirms that in making such Bid, neither he nor any company that he may represent, nor anyone on behalf of him or his company, directly or indirectly, has entered into any combination, collusion, undertaking or agreement with any other Bidder or Bidders to maintain the prices of said work, or any compact to prevent any other Bidder or Bidders from bidding on said contract or work and further affirms that such bid is made without regard or reference to any other Bidder or Proposal and without any agreement or understanding or combination, either directly or indirectly, with any other person or persons with reference to such bidding in any way or manner whatsoever.
- D. The undersigned, when notified of the acceptance of this Proposal, does hereby agree to enter into a construction contract with the Owner, within ten (10) calendar days from the date on the Notice of Acceptance, for the execution of the work described in the period of

Phone Number

are subject to either increase or decrease.

time, and he shall furnish the required Certificates of Insurance, Performance Bond and Payment Bond, with good and sufficient Surety.

E. The undersigned further agrees that if awarded the Contract he will commence the work within ten (10) calendar days after the date of the Notice to Proceed and that he will complete the work in accordance with the schedules and time frame set forth in the Contract or such amended time as may be granted. If the undersigned fails to complete any phase of the work within the given time frame and if he fails to complete all of the work on or before the expiration of the allowed calendar days, then and in that event, he further expressly agrees that, for each day that any phase of the work under this Contract remains uncompleted thereafter, the Owner may deduct from the Contract price herein specified the stipulated sum of liquidated damages as scheduled in the Contract and retain for failure of the undersigned to complete this Contract on or before the expiration of the scheduled critical time frames.

The undersigned agrees that the Owner's damages caused by delay are capable of being established but would be difficult to measure accurately and that the sums herein specified as liquidated damages listed in the Contract are not a penalty but represent that parties' estimate of the actual damages which the Owner would suffer per day if the work is not completed as scheduled.

- F. In submitting this Bid, it is understood that the right is reserved by the Owner to waive formalities, technicalities and irregularities, and to reject all Bids and to negotiate with apparent qualified low Bidder if necessary. It is agreed that THIS BID MAY NOT BE WITHDRAWN FOR A PERIOD OF NINETY (90) DAYS AFTER the opening thereof.
- G. The undersigned has attached hereto a Cashiers Check, or Bid Bond in the sum of

(\$\_\_\_\_\_\_USD), payable to the Savannah Airport Commission, as required in the NOTICE TO BIDDERS, and the undersigned agrees, that in case he fails to fulfill his obligations under the aforegoing Bid and Contract, the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission may, at its option, determine that the undersigned has abandoned his rights and interests in such Bid and that the Cashier's Check, or Bid Bond accompanying his Bid has been forfeited. Otherwise, the Cashier's Check or Bid Bond shall be returned to the undersigned upon the execution of the Contract and the acceptance of the Bonds and Insurance, or upon rejection of his bid.

- H. The undersigned affirms that he has completed, signed and included in their Bid Proposal the following:
  - 1. Bidder's Checklist (see first Paragraph of P-0.1)
  - 2. Proposal Form
  - 2. Bid Schedule
  - 3. Bid Bond (or Cashier's Check)
  - 4. Equal Employment Opportunity Report Statement
  - 5. Disadvantaged Business Enterprise Requirements
  - 6. Disadvantaged Business Enterprise Assurance Form
  - 7. Certificate of Non-Segregated Facilities
  - 8. Certificates of Buy-American Compliance
  - 9. Bidder Qualification Questionnaire
  - 10. DBE Subcontractor List
  - 11. DBE Notification of Intent to Subcontract (As required)

A bid shall be considered unresponsive and shall be rejected if it fails to include these fully executed statements or if the Bidder fails to furnish required data. When a determination has been made to award a Contract to a specific Contractor, such Contractor shall, prior to award, furnish such other pertinent information and assurances regarding his own employment policies and practices as well as those of his proposed subcontractors as the FAA, the Savannah Airport Commission, the City of Savannah, the Secretary of Labor, or the Office of Federal Contract Compliance (OFCC) may require.

- I. The Bidder shall furnish similar statements executed by each of his first tier and second tier subcontractors whose contracts equal ten thousand (\$10,000.00) dollars U.S. or more and shall obtain similar compliance by such subcontractors before awarding such subcontracts. No subcontract shall be awarded to any noncomplying subcontractor.
- J. The undersigned affirms that he has completed all of the blank spaces in the Bid Schedules with an amount in words and/or numbers and agrees that where a discrepancy occurs between the prices quoted in words and/or in numbers, the unit price written in words, unless obviously incorrect, shall take precedence and govern the final costs or Award of Contract. In the case of a tie Bid Price, the Owner may negotiate a price with each low tie Bidder.
- K. The undersigned agrees that the contract lump sum shall be decreased or increased where planned quantities shown on the drawings are decreased or increased, and that such increase or decrease shall be determined by use of the appropriate unit price if shown on the applicable Bid Schedules.
- L. The undersigned affirms that wages not less than the minimum rates or wages, as predetermined for this project by the U. S. Secretary of Labor and City of Savannah, were used in the preparation of this proposal.
- M. The undersigned affirms that wages not less than the minimum rates or wages, as predetermined for this project by the U. S. Secretary of Labor and City of Savannah, were used in the preparation of this proposal.

N. The undersigned acknowledges receipt of the following addenda:

ADDENDA NUMBER	DATED
continued if required	
0	kmanship and materials under all items of work he Date of Final Acceptance, unless otherwise
	ot less than the minimum rates or wages, as S. Secretary of Labor and the City of Savannah, osal.
The legal status of the undersigned is: (7) form (1., 2., or 3.) and strike out the other	The Bidder shall complete appropriate portion of r two.)
1. A corporation duly organized and	doing business under the laws of the State of
, fo	r whom bearing official title of, whose signature is affixed to this Bid, is duly
authorized to execute contracts.	_, whose signature is arrived to this bld, is dury
If a Foreign Corporation or non-State of	of Georgia Corporation: date of qualification in (State).
	(State).
	(State).
Name and address of Agent for Process: (Process in the State of Georgia):	(State).

О.

P.

Q.

If all partners are non-residents of Georgia: Designate name and address of agent required for service of process located in the state Georgia.

3. An individual, whose signature is affixed to this bid. (If non-residents of Georgia. (Designate name and address of agent required for service of process located in the state of Georgia.)

d and signed this	day of	, 2021.
NAME OF BIDDER:		
BY:	<u> </u>	
TITLE:		
BUSINESS ADDRESS:		
PHONE NO.	( )	
GEORGIA TAX REGISTRATION NO.		
WITNESS:		

# END OF PROPOSAL FORM

# **BID SCHEDULE**

In accordance with all bid documents, addenda, plans, and specifications, the undersigned proposes to furnish all services, material labor, tools, equipment, and other means of construction required for the **Southeast Quadrant Stormwater Drainage Improvements, SAC Job ID 30596.** 

TOTAL AMOUNT BI	D: \$							
TOTAL AMOUNT BID WRITTEN IN WORDS:								
NAME OF BIDDER:								
BY:								
TITLE:								
BUSINESS:								
ADDRESS:								
WITNESS:								
WITNESS:								

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
1	P-101-5.1	PAVEMENT DEMOLITION (CONCRETE, ASPHALT)	1	LS		
2	P-101-5.2	MISC DEMOLITION	1	LS		
3	P-101-5.3	DRAINAGE DEMOLITION	1	LS		
4	P-105-2.1	MOBILIZATION	1	LS		
5	GDOT 104	МОТ	1	LS		
6	P-151-4.1	LIGHT CLEARING AND GRUBBING (FOR INDIVIDUAL TREES)	1	AC		
7	P-151-4.2	HEAVY CLEARING AND GRUBBING	14.5	AC		
8	P-152-4.1	EXCAVATION AND EMBANKMENT	222,359	CY		
9	P-102-5.1	SEDIMENT BARRIER - NON-SENSITIVE AREAS (Sd1- NS)	10,500	LF		
10	P-102-5.2	SEDIMENT BARRIER - SENSITIVE AREAS (Sd1-S)	9,000	LF		
11	P-102-5.3	INLET SEDIMENT TRAP - FILTER FABRIC WITH SUPPORTING FRAME (Sd2-F)	17	EA		
12	P-102-5.4	ROCK FILTER DAM (Rd)	350	LF		
13	P-102-5.5	CONSTRUCTION EXIT (Co)	3	EA		
14	P-102-5.6	DISTURBED AREA STABILIZATION WITH MULCHING ONLY (Ds1)	113,000	SY		
15	P-102-5.7	DUST CONTROL ON DISTURBED AREAS (Du)	113,000	SY		
16	P-102-5.8	STORM DRAIN OUTLET PROTECTION (St)	93	TNS		
17	P-102-5.9	FLOATING SURFACE SKIMMER (St)	2	EA		
18	1000-1	G.A.N.G. FITNESS TRACK MODIFICATIONS	1,000	SY		
19	1000-2	OPENCUT PAVEMENT REPLACEMENT AREA 1	1	LS		
20	1000-3	OPENCUT PAVEMENT REPLACEMENT AREA 2	1	LS		
21	1000-4	OPENCUT PAVEMENT REPLACEMENT AREA 3	1	LS		
22	1000-5	OPENCUT PAVEMENT REPLACEMENT AREA 4	1	LS		
23	1000-6	OPENCUT PAVEMENT REPLACEMENT AREA 5	1	LS		

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
24	1000-7	OPENCUT PAVEMENT REPLACEMENT AREA 6	1	LS		
25	1000-8	OPENCUT PAVEMENT REPLACEMENT AREA 7	1	LS		
26	1000-9	OPENCUT PAVEMENT REPLACEMENT AREA 8	1	LS		
27	1000-10	OPENCUT PAVEMENT REPLACEMENT AREA 9	1	LS		
28	F-162-5.1	8' TYPE E GALVANIZED CHAIN LINK FENCE WITH GALVANIZED POSTS, NO. 7 GAUGE TOP AND BOTTOM TENSION WIRE, AND 3 STRANDS OF GALVANIZED BARBED WIRE ON TYPE 1 EXTENSION ARMS, INSTALLED IN TURF OR PAVEMENT	4,650	LF		
29	F-162-5.2	6' TYPE E GALVANIZED CHAIN LINK FENCE WITH GALVANIZED POSTS, NO. 7 GAUGE TOP AND BOTTOM TENSION WIRE, AND 3 STRANDS OF GALVANIZED BARBED WIRE ON TYPE 1 EXTENSION ARMS, INSTALLED IN TURF OR PAVEMENT	400	LF		
30	F-162-5.3	REMOVAL OF EXISTING CHAIN LINK FENCE WITH BARBED WIRE	3,985	LF		
31	F-162-5.4	TEMPORARY CHAIN-LINK FENCE, 6' HIGH WITH 3 STRANDS BARBED WIRE	4,600	LF		
32	F-162-5.5	RE-INSTALL A.O.A. 6' HIGH WITH 3 STRANDS BARBED WIRE 16' SWING GATE @ BOB HARMON RD. AND CORPORATE RD.	1	EA		
33	F-162-5.6	G.A.N.G. 8' TYPE E GALVANIZED CHAIN LINK FENCE WITH GALVANIZED POSTS, NO. 7 GAUGE TOP AND BOTTOM TENSION WIRE, AND 3 STRANDS OF GALVANIZED BARBED WIRE ON TYPE 1 EXTENSION ARMS, INSTALLED IN TURF OR PAVEMENT - WITH DEADMAN ANCHORS AND CABLE REINFORCEMENT	190	LF		
34	F-162-5.7	G.A.N.G. NEW 16' SWING GATE, DOUBLE LEAF, WITH DEADMAN ANCHORS AND CABLE REINFORCEMENT	1	EA.		
35	F-162-5.8	NEW RESTRICTED AREA SIGNS FOR NEW FENCE	15	EA		
36	D-701-5.1	15" RCP, CLASS III	8	LF		
37	D-701-5.2	18" RCP, CLASS III	96	LF		
38	D-701-5.3	24" RCP, CLASS III	226	LF		
39	D-701-5.4	30" RCP, CLASS III	395	LF		

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
40	D-701-5.5	36" RCP, CLASS III	16	LF		
41	D-701-5.6	42" RCP, CLASS III	8	LF		
42	D-701-5.7	48" RCP, CLASS III	2,916	LF		
43	D-701-5.8	54" RCP, CLASS III	480	LF		
44	D-701-5.9	60" RCP, CLASS III	1,268	LF		
45	D-701-5.10	14" X 23" ERCP, CLASS IV	56	LF		
46	D-701-5.11	38" X 60" ERCP, CLASS IV	1,360	LF		
47	D-701-5.12	CONCRETE COLLAR PIPE CONNECTION, 15" RCP, CLASS III	1	EA		
48	D-701-5.13	CONCRETE COLLAR PIPE CONNECTION, 18" RCP, CLASS III	1	EA		
49	D-701-5.14	CONCRETE COLLAR PIPE CONNECTION, 24" RCP, CLASS III	2	EA		
50	D-701-5.15	CONCRETE COLLAR PIPE CONNECTION, 36" RCP, CLASS III	2	EA		
51	D-701-5.16	CONCRETE COLLAR PIPE CONNECTION, 42" RCP, CLASS III	1	EA		
52	D-701-5.17	CONCRETE COLLAR PIPE CONNECTION, 48" RCP, CLASS III	2	EA		
53	D-751-5.1	STRUCTURE SD01	1	EA		
54	D-751-5.1A	STRUCTURE SD01A (INCLUDING SECURITY BAR GRATES)	1	EA		
55	D-751-5.2	STRUCTURE SD02A	1	EA.		
56	D-751-5.2A	STRUCTURE SD02C (INLCUDING SECURITY BAR GRATES)	1	EA		
57	D-751-5.3	STRUCTURE SD02B	1	EA.		
58	D-751-5.3A	STRUCTURE SD02D (INCLUDING SECURITY BAR GRATES)	1	EA		
59	D-751-5.4	STRUCTURE SD03	1	EA.		
60	D-751-5.5	STRUCTURE SD04	1	EA.		
61	D-751-5.6	STRUCTURE SD10	1	EA.		
62	D-751-5.7	STRUCTURE SD11	1	EA.		

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
63	D-751-5.8	STRUCTURE SD12	1	EA.		
64	D-751-5.9	STRUCTURE SD12A	1	EA.		
65	D-751-5.10	STRUCTURE SD13	1	EA.		
66	D-751-5.11	STRUCTURE SD14	1	EA.		
67	D-751-5.12	STRUCTURE SD15	1	EA.		
68	D-751-5.13	STRUCTURE SD16	1	EA.		
69	D-751-5.14	STRUCTURE SD17	1	EA.		
70	D-751-5.15	STRUCTURE SD18	1	EA.		
71	D-751-5.16	STRUCTURE SD19	1	EA.		
72	D-751-5.17	STRUCTURE SD20	1	EA.		
73	D-751-5.18	STRUCTURE SD21	1	EA.		
74	D-751-5.19	STRUCTURE SD22	1	EA.		
75	D-751-5.20	STRUCTURE SD23	1	EA.		
76	D-751-5.21	STRUCTURE SD23A	1	EA.		
77	D-751-5.22	STRUCTURE SD24	1	EA.		
78	D-751-5.23	STRUCTURE SD25	1	EA.		
79	D-751-5.24	STRUCTURE SD25A	1	EA.		
80	D-751-5.25	STRUCTURE SD25B	1	EA.		
81	D-751-5.26	STRUCTURE SD26	1	EA.		
82	D-751-5.27	STRUCTURE SD27	1	EA.		
83	D-751-5.28	STRUCTURE SD28	1	EA.		
84	D-751-5.29	STRUCTURE SD29	1	EA.		
85	D-751-5.30	STRUCTURE SD31	1	EA.		
86	D-751-5.31	STRUCTURE SD32	1	EA.		

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
87	D-751-5.32	STRUCTURE SD34	1	EA.		
88	D-751-5.33	STRUCTURE SD35	1	EA.		
89	D-751-5.34	STRUCTURE SD35A	1	EA.		
90	D-751-5.35	STRUCTURE SD36	1	EA.		
91	D-751-5.36	STRUCTURE SD37	1	EA.		
92	D-751-5.37	STRUCTURE SD40	1	EA.		
93	D-751-5.38	STRUCTURE SD40A	1	EA.		
94	D-751-5.39	STRUCTURE SD41	1	EA.		
95	D-751-5.40	STRUCTURE SD42	1	EA.		
96	D-751-5.41	STRUCTURE SD43	1	EA.		
97	D-751-5.42	STRUCTURE SD44	1	EA.		
98	D-751-5.43	STRUCTURE SD45	1	EA.		
99	D-751-5.44	STRUCTURE SD50	1	EA.		
100	D-751-5.45	STRUCTURE SD51	1	EA.		
101	D-751-5.46	FABRIFORM REVETMENT	4,400	SY		
102	T-901-5.1	HYDROSEEDING	10	AC		
103	T-904-5.1	BERMUDA SODDING	63,000	SY		
104	SUC-1	UTILITY CROSSING 2 - 8" WATER	1	EA		
105	SUC-2	UTILITY CROSSING 3 - 8" WATER	1	EA		
106	SUC-3	UTILITY CROSSING 5 - 8" SANITARY	1	EA		
107	SUC-4	UTILITY CROSSING 6 - 8" SANITARY	1	EA		
108	SUC-5	UTILITY CROSSING 7 - 8" SANITARY	1	EA		
109	SUC-6	UTILITY CROSSING 8 - 8" WATER	1	EA		
110	SUC-7	UTILITY CROSSING 9 - 8" WATER	1	EA		

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
111	SUC-8	UTILITY CROSSING 11 - 8" WATER	1	EA		
112	SUC-9	UTILITY CROSSING 12 - 8" WATER	1	EA		
113	SUC-10	UTILITY CROSSING 14 - 24" WATER (RELOCATION)	1	EA		
114	SUC-11	UTILITY CROSSING 16 - 8" WATER	1	EA		
115	SUC-12	UTILITY CROSSING 17 - 8" WATER	1	EA		
116	SUC-13	UTILITY CROSSING 18 - 8" WATER	1	EA		
117	SUC-14	UTILITY CROSSING 25 - 6" WATER	1	EA		
118	SUC-15	UTILITY CROSSING 26 - 6" SANITARY FM	1	EA		
119	SUC-16	UTILITY CROSSING 30 - 30" WATER (RELOCATION)	1	EA		
120	SUC-17	UTILITY CROSSING 33 - 8" WATER	1	EA		
121	SUC-18	UTILITY CROSSING 34 - 8" SANITARY	1	EA		
122	SUC-19	UTILITY CROSSING 41 - 20" SANITARY FM	1	EA		
123	SUC-20	UTILITY CROSSING 42 - 20" SANITARY FM	1	EA		
124	DUC-1	UTILITY CROSSING 1 - UC	1	EA		
125	DUC-2	UTILITY CROSSING 4 - UC	1	EA		
126	DUC-3	UTILITY CROSSING 10 - UC	1	EA		
127	DUC-4	UTILITY CROSSING 13 - UC	1	EA		
128	DUC-5	UTILITY CROSSING 15 - UKN	1	EA		
129	DUC-6	UTILITY CROSSING 19 - GAS	1	EA		
130	DUC-7	UTILITY CROSSING 20 - UC	1	EA		
131	DUC-8	UTILITY CROSSING 21 - UC	1	EA		
132	DUC-9	UTILITY CROSSING 22 - GAS	1	EA		
133	DUC-10	UTILITY CROSSING 23 - UC	1	EA		
134	DUC-11	UTILITY CROSSING 24 - UC	1	EA		

NUM.	ITEM NO.	ITEM DESCRIPTION	QUAN.	UNIT	<b>UNIT PRICE \$</b>	EXTENDED TOTAL \$
135	DUC-12	UTILITY CROSSING 27 - UKN	1	EA		
136	DUC-13	UTILITY CROSSING 28 - UE	1	EA		
137	DUC-14	UTILITY CROSSING 29 - UC	1	EA		
138	DUC-15	UTILITY CROSSING 31 - GAS	1	EA		
139	DUC-16	UTILITY CROSSING 32 - UE	1	EA		
140	DUC-17	UTILITY CROSSING 35 - UC	1	EA		
141	DUC-18	UTILITY CROSSING 36 - UC	1	EA		
142	DUC-19	UTILITY CROSSING 37 - UC	1	EA		
143	DUC-20	UTILITY CROSSING 38 - UE	1	EA		
144	DUC-21	UTILITY CROSSING 39 - UC	1	EA		
145	DUC-22	POWER POLE RELOCATION	7	EA		
146	A-1	GATE SECURITY GUARD ALLOWANCE	1	AL		
		SE QUADRANT STORM DRAINAGE IMPROVEMENTS:	\$			

# **END OF BID SCHEDULE**

#### **BID BOND**

(Not to be Filled out if a Certified or Cashier's Check is Submitted)

KNOW ALL	MEN BY	THESE	<b>PRESENTS</b>	: That	we, the	undersigned	1 Bidder
		, as F	Principal, and				, as a
Corporation Surety auth	orized under th						
,	and authorized	l to write th	nis type of bond	through a	a resident a	gent of the co	orporation
located in the State of			, as surety, are	held and	firmly bou	nd unto the M	Mayor and
Aldermen of the Ci	ty of Savan	nah and	the Savannah	Airport	commissi	on in the	sum of
							Dollars
(\$	) for	r the payme	ent of which, well	l and truly	to be made	e, we hereby j	ointly and
severally bind ourselves	and our heirs, e	executors, a	dministrators, su	iccessors	and assigns		

THE CONDITION OF THE ABOVE OBLIGATION is such that if the attached Proposal of Dollars (\$\_\_\_\_\_\_\_) for the improvement of airport facilities – **Southeast Quadrant Stormwater Drainage Improvements, SAC Job ID 30596** stipulated in said Proposal in accordance with the Contract documents consisting of the Plans and Specifications, and all addenda or other revisions, provided therefore, is accepted and the Contract awarded to the above named Bidder, and the said Bidder shall within ten (10) calendar days after notice of said award enter into a Contract in writing and furnish the required Payment and Performance Bonds and insurance with surety, or sureties, to be approved by the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission this obligation shall be void. Otherwise, the same shall be in full force and virtue of law, and the full amount of this Bid Bond will be paid to the Mayor and Aldermen of the City of Savannah and the Savannah Airport commission as stipulated for liquidated damages.

Signed this day	y of			, <u>2021</u> .		
Contractor must indicate whether	Corp	ooration:		Partnership:		
Corporation, Partnership, Company or Individual	Con	Company:		Individual:		
This person signing shall in his ou	'n	Princ	ipal			
This person signing shall, in his ow handwriting, sign the principal's na	ame BY:					
and title. Where the person signing a corporation is other than the presi	*					
or vice president, that person must, affidavit as contained herein, show	•	Title				
authority to bind the corporation.		Suret	Surety (Company Name)			
(Affix Surety's Corporate Seal)	BY					
		Suret	Surety (Signature)			
		Suret	y (Print	)		
		Georg	gia Resi	dent Agent		
		Georg	gia Lice	ense Number		

## **END OF BID BOND**

#### EQUAL OPPORTUNITY REPORT STATEMENT

As Required By 41 CFR 60-1.7(b)

The Bidder (Proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bid:

- 1. The Bidder (Proposer) has \_\_\_\_\_ has not \_\_\_\_\_ developed and has on file at each establishment Affirmative Action Programs pursuant to 41 CFR 60-1.40 and 41 CFR 60-2.
- 2. The Bidder (Proposer) has \_\_\_\_\_ has not \_\_\_\_\_ participated in any previous contract or subcontract subject to the Equal Opportunity Clause prescribed by Executive Order 11246, as amended.
- 3. The Bidder (Proposer) has \_\_\_\_\_ has not \_\_\_\_\_ filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
- 4. The Bidder (Proposer) does \_\_\_\_\_ does not \_\_\_\_\_ employ fifty (50) or more employees.

NAME OF BII	DDER:
BY:	
	(SIGNATURE)*
TITLE:	

DATE:

\* Must be same signature on Bid Proposal

# END OF EQUAL OPPORTUNITY REPORT STATEMENT

# DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

# THE FOLLOWING BID CONDITIONS APPLY TO THIS CONTRACT. SUBMISSION OF A PROPOSAL BY A PROSPECTIVE CONTRACTOR SHALL CONSTITUTE FULL ACCEPTANCE OF THESE BID CONDITIONS.

# A. DEFINITION (49 CFR Part 26.5)

- 1. Disadvantaged Business Enterprise (DBE) as used in this Contract shall have the same meaning as those firms that are presumed to be socially and economically disadvantaged as defined in Paragraph 26.5, 49 CFR Part 26.
- 2. To review 49 CFR Part 26 in its entirety, go to <u>www.osdbu.dot.gov</u>. Select DBE Program, click on 49 CFR 26, and review the Federal Regulation.

# B. POLICY

It is the policy of the Savannah Airport Commission that Disadvantaged Business Enterprises shall have an equal opportunity to participate in the performance of all contracts and subcontracts.

## C. DBE OBLIGATION

All Bidders, Prospective Contractors, or Contractors shall take all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises have an equal opportunity to compete for and perform contracts. Bidders, Prospective Contractors, or Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of Contracts.

# D. COMPLIANCE

All Contractors or subcontractors for U.S. DOT-assisted contracts are hereby notified that failure to carry out the U.S. DOT policy and the DBE obligation, as set forth herein for this project, shall constitute a breach of contract which may result in termination of the contract or such other remedy as deemed appropriate by the Savannah Airport Commission. The Savannah Airport Commission has the right to revise these program specifications at any time before or during the project by addendum or amendment in order to comply with FAA Regulations and/or directives.

1. The Savannah Airport Commission has the right, at its sole discretion, to accept or reject any DBE participation (and/or percentage of) and accept or reject any good-faith efforts.

# E. CONTRACT ASSURANCE (49 CFR Part 26.13[b])

The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of U.S. DOT-assisted contracts. As outlined above, failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Commission may deem appropriate.

# F. SUBCONTRACT CLAUSES

These DBE Requirements shall be made a part of each agreement with all contractors and subcontractors on U.S. DOT-assisted contracts.

# G. CONTRACT AWARD ELIGIBILITY

- 1. Bidders, Prospective Contractors, or Contractors are hereby advised that meeting DBE subcontract goal or making a documented good-faith effort to meet such goal to the satisfaction of the Savannah Airport Commission in their sole discretion is a condition of being awarded this DOT-assisted contract.
- 2. The Savannah Airport Commission proposes to award the contract to the lowest responsive Bidder, Prospective Contractor, or Contractor submitting a reasonable bid provided the Bidder, Prospective Contractor, or Contractor has met the goal for DBE participation or, if failing to meet the goal, the Bidder, Prospective Contractor, or Contractor has documented an acceptable good-faith effort to meet the established goal for DBE participation. The Bidder, Prospective Contractor, or Contractor is advised that the Savannah Airport Commission at its sole discretion will determine whether or not the Bidder, Prospective Contractor, or Contractor has made an acceptable good-faith effort towards meeting the DBE goal to qualify for contract award. The Savannah Airport Commission has the right to reject any and all bids submitted and accept or reject any good-faith efforts.

# H. SUBCONTRACT GOAL

- 1. The attainment of the goal established for this Contract is to be measured as a percentage of the total dollar value of the Contract.
- 2. The goal established for this Contract is as follows:

# 12.3% to be performed by DBEs.

# I. AVAILABLE CERTIFIED DBEs

1. This contract is subject to the certification procedures outlined in 49 CFR Part 26.81 – Unified Certification Program (UCP). The UCP is administered by the Georgia Department of Transportation (GDOT).

- 2. The Georgia Department of Transportation (GDOT) has developed a Disadvantaged Business Enterprise (DBE) Directory for the Unified Certification Program. The Directory is available by contacting the Georgia Department Transportation Civil Rights Office on line at <u>www.dot.state.ga.us</u>. The GDOT may be reached by telephone at (404) 631-1972.
- 3. According to 49 CFR Part 26.81, subparagraph (c) "all certifications by UCPs shall be pre-certifications; i.e., certifications that have been made final before the due date for bids or offers on a contract on which a firm seeks to participate as a DBE."
- 4. For this contract, only those DBE firms that are certified under the UCP as administered by the GDOT shall be acceptable. Firms who desire certification, must complete the GDOT Uniform Certification Application in its entirety (as applicable), which can be obtained from the GDOT's website: www.dot.state.ga.us. You may also contact the Georgia Department of Transportation Office at (404) 631-1972.

# J. DBE PARTICIPATION COUNTED TOWARD GOAL (49 CFR Part 26.55)

Bidders, Prospective Contractors, or Contractors shall apply the standards outlined by 49 CFR Part 26.55 when determining how DBE participation is to be counted towards the goal on this contract. Please refer to <u>www.osdbu.dot.gov</u>. Select DBE Program, clock on 49 CFR 26, and scroll to Part 26.55 – "How is DBE participation counted towards goal?"

# K. BIDDER'S REQUIRED SUBMISSION

- 1. The following documents must include the information requested and be submitted with the Bid Proposal:
  - a. **DBE SUBCONTRACTORS LIST**
  - b. **DBE ASSURANCE FORM**
  - c. Good-faith efforts documentation, in accordance with Paragraph "L".
- 2. The following document must include the information requested and be submitted with the Bid Proposal or within five (5) business days after bid opening.
  - a. **DBE NOTIFICATION OF INTENT TO SUBCONTRACT** for each DBE subcontractor.

# L. GOOD-FAITH EFFORTS (49 CFR Part 26.53)

Good-faith efforts are required by the Bidder, Prospective Contractor, or Contractor when the DBE goal established for a contract is not met, or at any time during the contract when the achievement of the DBE goal is in jeopardy. The Bidder, Prospective Contractor, or Contractor is responsible for providing and/or indicating in writing to the satisfaction of the Commission all efforts that would demonstrate good faith in the solicitation of DBE participation for this contract. In the process of awarding the bid or at any time during the contract as outlined above, the Commission will evaluate the efforts of the Bidder, Prospective Contractor, or Contractor in accordance with 49 CFR Part 26, Appendix A and Part 26.53. <u>The Commission's evaluation</u>

will focus on those efforts made prior to bid opening. The Commission reserves the right in its sole discretion to accept or reject any or all efforts by the Bidder, Prospective Contractor, or Contractor.

In order to review the efforts that will be considered acceptable by the Commission in accordance with Part 26, in its entirety, the Bidder, Prospective Contractor, or Contractor must refer to <u>www.osdbu.dot.gov</u>, 49 CFR Part 26, Section 26.109, "What are the rules governing information, confidentiality, cooperation, and intimidation or retaliation", then scroll down to Appendix A to Part 26 – "Guidance Concerning Good-Faith Efforts". Also, refer to Section 26.53 – "What are the good faith procedures recipients follow in situations where there are contract goals".

Examples of acceptable good-faith efforts in accordance with Part 26, in part, are as follows:

- a. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract.
- b. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.
- c. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- d. Negotiating in good faith with interested DBEs.
- e. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities.
- f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- h. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

# M. ADMINISTRATIVE RECONSIDERATION (49 CFR PART 26.53)

Within two business days if being informed by the Savannah Airport Commission that it is not responsive because it has not documented sufficient good-faith efforts, a bidder/contractor may request administrative reconsideration. Bidder/contractor should make this request in writing to the following reconsideration official: Executive Director, 400 Airways Avenue, Savannah, GA 31408, Facsimile, 912-964-0877. The reconsideration official will not have played any role in the original determination that the bidder/contractor did not document sufficient good-faith efforts.

As part of this reconsideration, the bidder/contractor will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good-faith efforts to do so. The bidder/contractor will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate good-faith efforts to do so. The Commission will send the bidder/contractor a written decision on reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good-faith efforts to do so. The result of the reconsideration process is not administratively appealable to the Department of Transportation.

# N. PROMPT PAYMENT (49 CFR Part 26.29)

The prime contractor shall certify in writing that all subcontractors and suppliers have been paid for work and materials from previous progress payments received, less any retainage, by the prime contractor prior to receipt of any further progress payments (Periodic Pay Request Affidavit, and Final Pay Request Affidavit).

The prime contractor is required to pay each subcontractor/supplier for satisfactory performance of its contract no later than ten (10) days from the receipt of each payment the prime contractor receives from the Savannah Airport Commission.

The Commission will hold retainage from prime contractors and provide for prompt and regular incremental acceptances of portions of the prime contract and then pay retainage to prime contractors based on these acceptances. The prime contractor must pay all retainage owed to their subcontractors for satisfactory completion of the accepted work within thirty (30) days after the Commission's payment to the prime contractor.

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 Commission. When the Commission 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.

Any delay or postponement of payment from the above referenced timeframes may occur only for good cause following written approval of the Commission. The prime contractor will not be reimbursed for work performed by subcontractors unless and until the prime contractor ensures that the subcontractors are promptly paid for the work they have performed. The Savannah Airport Commission will require prime contractors to include a similar clause in their subcontracts requiring subcontractors to promptly pay their sub-subcontractors.

Unless delay or postponement of payment is approved in writing by the Commission, in accordance with this provision, failure by the prime contractor to comply with these prompt payment requirements may result in the prime contractor being placed in default of its contract. In addition, violation of this provision by prime contractor entitles the Commission to exercise any other rights it has by law or under the Contract. (See General Conditions, Section 80, paragraph 80-08).

In order to properly monitor payments to DBEs, and as required by the Commission the prime contractor will be required to send along with each payment to their DBE subcontractor or supplier a "Verification of Payments Received Letter", which the DBE(s) must sign and return to the Commission's DBELO for monitoring and DBE Program record keeping purposes.

The Commission will also require each prime contractor to submit to the Commission a monthly pay request which shall be accompanied by a "DBE Utilization Form" which is a report of DBE expenditures. The report will show DBE subcontractors, and non-DBE subcontractors if and as required by the Commission, the amount of their subcontract, the amount earned to date, the amount earned for that respective pay request and the amount remaining to be earned. At the sole discretion of the Commission, the contractor's future pay requests will be withheld or disapproved until the DBE Utilization Form is submitted as required, and until DBEs are promptly and properly paid as verified by receipt of the Verification of Payments Received Letter.

Prior to close out of the project, the Commission may also require that the prime contractor furnish and/or require the prime contractor to have its subcontractor(s) furnish to the Commission with copies of canceled checks, invoices, and/or any other information from DBE subcontractors/sub-subcontractors utilized on the project.

To the extent that there is any inconsistency between the original and these amendments, the amendments shall take precedence.

# END OF DBE REQUIREMENTS

#### **DISADVANTAGED BUSINESS ENTERPRISE ASSURANCE FORM**

The Bidder, Prospective Contractor, or Contractor shall complete the following statement by checking the appropriate box (check one only). Failure to complete this statement shall be grounds for rejection of Bid.

- The Bidder, Prospective Contractor, or Contractor is able to assure meeting the requirements of the DBE Provisions, included under the DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS, and shall utilize not less than the prescribed Contract Goal of 12.3% (percent) DBE participation.
- □ The Bidder, Prospective Contractor, or Contractor is unable to assure DBE participation of 12.3% (percent) in this Contract but shall provide for a minimum of \_\_\_\_\_% (percent) DBE participation. (If this box is checked, Bidder shall fill-in the percentage blank and document on a separate attachment the efforts undertaken in attempting to meet the Contract Goal as instructed under the DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS, Paragraph L Good-Faith Efforts, which must be submitted by the apparent low bidder for approval prior to award of this contract.)

(Company Name of Bidder/Prospective Contractor/Contractor) (Printed or Typed)

IRS Number: \_\_\_\_\_

(Printed Name of Person Signing)

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

(Signature)\*

Title:

Date: \_

\*Must be same signature of Bid Proposal.

# END OF DBE ASSURANCE FORM

#### **CERTIFICATE OF NON-SEGREGATED FACILITIES**

CERTIFICATION TO BE SUBMITTED BY CONSTRUCTION CONTRACTORS OF APPLICANTS AND THEIR SUBCONTRACTORS (APPLICABLE TO CONSTRUCTION CONTRACTS AND RELATED SUBCONTRACTS EXCEEDING TEN THOUSAND (\$10,000.00) DOLLARS (US) WHICH ARE NOT EXEMPT FROM THE EQUAL OPPORTUNITY CLAUSE.)

The federally assisted Construction Contractor certifies that he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted Construction Contractor certifies that he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The federally assisted Construction Contractor agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting room, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally assisted Construction Contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding ten thousand (\$10,000.00) dollars (US) which are not exempt from the provisions of the equal opportunity clause and that he will retain such certifications in his files.

Signature of Contractor

Title

Printed Name of Contractor

# END OF CERTIFICATE OF NON-SEGREGATED FACILITIES

# SAVANNAH AIRPORT COMMISSION BUY AMERICAN PREFERENCE STATEMENT

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

# END OF BUY AMERICAN PREFERENCE STATEMENT

# **CERTIFICATE OF BUY AMERICAN COMPLIANCE**

# FOR TOTAL FACILITY:

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark ( $\checkmark$ ) or the letter "X".

Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States; or
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
  - □ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
    - a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
    - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
    - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
    - d) To furnish U.S. domestic product for any waiver request that the FAA rejects.

To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

# **Required Documentation**

**Type 3 Waiver** – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the "facility". The required documentation for a Type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

**Type 4 Waiver** – Total cost of project using U.S. domestic source product exceeds the total project cost using nondomestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

**False Statements**: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

# FOR MANUFACTURED PRODUCTS:

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark ( $\checkmark$ ) or the letter "X".

□ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States;
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- 1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- 2. To faithfully comply with providing U.S. domestic product.
- 3. To furnish U.S. domestic product for any waiver request that the FAA rejects
- 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

□ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

- 1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
- 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
- 3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

# **Required Documentation**

**Type 3 Waiver** – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the "item". The required documentation for a Type 3 waiver is:

 a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

**Type 4 Waiver** – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

**False Statements**: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

# FOR STEEL & MANUFACTURED PRODUCTS

By submitting a Bid/Proposal under this Solicitation, except for those items listed by the offeror below or on a separate and clearly identified attachment to this Bid/Proposal, the offeror certifies that steel and each manufactured product, is produced in the United States and that components of unknown origin are considered to have been produced or manufactured outside the United States.

Product:	Country of Origin:

# END OF CERTIFICATE FOR BUY AMERICAN COMPLIANCE

#### **BIDDER QUALIFICATION QUESTIONNAIRE**

(Bidders shall fully respond to all items)

Each Bidder shall furnish with his Bid the following completed and signed statement pertaining to the Bidder's competency and responsibility. In addition, the Owner reserves the right to conduct such additional investigation into the competency and responsibility of the Bidders (or any particular Bidder) as the Owner may deem necessary. Each Bidder shall fully cooperate with all such investigations.

FIRM:	
ADDRESS:	
PHONE:	
Contact in your firm for inquiries:	
Years in business under present name:	
Date of Incorporation:	
Place of Incorporation:	
Contracting specialties:	
Years performing work specialties:	
Geographic areas of business operation:	
List all Projects presently under contract:	
(Attach additional sheet(s) if necessary)	
Contract value of work presently under construction:	\$
Average annual contract value of construction work last three years:	\$
Total bonding capacity:	\$

AIP – SAC 30596 – BIDDERS QUALIFICATION QUESTIONNAIRE

Value of work presently bonded:	\$
Bonding Company:	
Insurance Agent:	
Phone:	
What types of work are generally performed	by your own forces?
(Attach additional sheet(s) if necessary)	
What work will be performed by your own f	orces on this Project?
(Attach additional sheet(s) if necessary)	
Total employees employed by firm:	
Engineers & Architects	Estimators
CPM Project Managers	Tradesmen Purchasing Agents
Superintendents	Other (Describe)
Value of capital equipment owned by firm:	\$
Bank references and addresses:	

Has firm experience with projects of a similar nature and scope within the past ten (10) years? If yes, describe:

Architect or Engineer	Contract with: (Firm, Address, Person, Phone)	Amount (\$):	Date Complete:
	Engineer		

(Attach additional sheet(s) if necessary)

Has firm failed to complete a contract within the past ten (10) years? If yes, describe:

\_\_\_\_\_

\_\_\_\_\_

(Attach additional sheet(s) if necessary)

Has firm been involved in a bankruptcy or reorganization within the past ten (1) years? If yes, describe:

\_\_\_\_\_

\_\_\_\_\_

(Attach additional sheet(s) if necessary)

Has firm pending claims or suits by others against firm? If yes, describe:

(Attach additional sheet(s) if necessary)

Has firm pending claims or suits by firm against others? If yes, describe:

(Attach additional sheet(s) if necessary)

Has firm filed written claims or suits against others within the past two (2) years? If yes, describe:

\_\_\_\_\_

(Attach additional sheet(s) if necessary)

Has firm been refused a bond within the past five (5) years? If yes, describe:

(Attach additional sheet(s) if necessary)

Is firm in compliance with all EEO requirements?

List three (3) most significant projects presently under construction:

\_\_\_\_\_

Project & Location	Architect or Engineer	Contract with: (Firm, Address, Person, Phone)	Amount (\$):	Date Complete:

(Attach additional sheet(s) if necessary)

Name of individual with direct managerial responsibility for this entire project:

List the name, title, experience, and area of responsibility of each manager and superintendent which bidder will use on this Project:

Name:	Title:	Experience in this type of work (Years):	Area of Responsibility:

(Attach additional sheet(s) if necessary)

The undersigned guarantees the truth and accuracy of all statements and all answers to questions herein made.

Enclose a copy of latest audited financial statement.

This form shall be signed by an Officer of the firm or an individual so authorized by an Officer of the Firm.

Type of Firm:

Corporation:	
Partnership:	
Sole Proprietorship:	

Signature:

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

Title:

# END OF BIDDERS QUALIFICATION QUESTIONNAIRE

#### SUBCONTRACTORS LIST

THIS SUBCONTRACTOR LIST IS NOT REQUIRED FOR SUBMISSION WITH PROPOSAL DOCUMENTS BUT SHALL BE SUBMITTED BY APPARENT LOW BIDDER WITHIN 48 HOURS AFTER OPENING OF PROPOSALS.

This list is attached to and is made an integral part of the Bid Proposal submitted by: (Bidder to insert full name and address)

For the construction of:

# Southeast Quadrant Stormwater Drainage Improvements

The undersigned, hereinafter called "Bidder", lists below the names of the subcontractors who will perform the phases of the work indicated;

SUBCONTRACT ITEM OF WORK	NAME AND ADDRESS OF SUBCONTRACTOR		

(Attach additional sheet(s) if necessary)

The Bidder declares that he has fully investigated each subcontractor listed and has received and has in his files evidence that each subcontractor maintains a fully equipped organization capable, technically and financially, of performing the pertinent work, and that he has performed similar installations in a satisfactory manner. The Bidder further declares that he shall not change any of these designated subcontractors for work on this Project without Owner's written permission.

In witness thereof, the Bidder has hereunto set his signature and affixed his seal this \_\_\_\_\_ day of

	,	<u>2021.</u>	
Firm Name:			 
By:			 
Title:			

# END OF SUBCONTRACTORS LIST

# DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTORS LIST

(Reproduce if additional copies are needed)

Disadvantaged Business Enterprise Subcontractor (Company Name)	Description of Work/Materials	Dollar Value of Subcontract Work *

Total Dollar Value of Subcontract Work	\$
--	----

Total Dollar Value of Basic Bid

\$\_\_\_\_\_

Percent of Total (\*See note below)

v) \_\_\_\_\_%

\* NOTE: <u>IMPORTANT</u> – Not all DBE participation can be counted at 100%. For example, when using a regular dealer for supplies and materials, participation must be counted at 60% of the value. Also, all DBE firms must perform a commercially useful function. Before calculating the percentage, refer to Paragraph "J" - DBE PARTICIPATION COUNTED TOWARD GOAL for these and other requirements.

#### END OF DBE SUBCONTRACTORS LIST

#### **DBE NOTIFICATION OF INTENT TO SUBCONTRACT**

Projec	t Name: Southeast Quadrant Stormwater Drain	age Improve	<u>ments</u> Bi	d Date:	
Contra	ctor:				
Hereby	intends to subcontract or purchase materials for	or the followi	ng work items	to:	
DBE:	Name				
	Address				
	City/State/Zip		Phone		
Item No.	Description of Work/Materials	Unit	Quantity	Unit Cost	Amount
			<u> </u>		
	\$ Value =		\$		
	and/or if regular dealer X 60% (Refer	to Paragraph "	J") \$		
	Total \$ Value		\$		
DBE S	ub or Supplier Signature				
	Title				
	Date				
Prime (	Contractor Signature				
	Title				
	Date				

This form must be signed by the Prime Contractor and the DBE Subcontractor. A separate form is required for each DBE Subcontractor. The form(s) shall be submitted whether or not DBE participation is being proposed. If DBE participation is not being proposed, Bidder, Prospective Contractor, or Contractor must indicate "NONE" beside DBE name and mark "0" in \$ value space. The proposed contract amounts specified on this form for a DBE firm must be the same (verify) as the amounts shown on the DBE Subcontractor's List for the same DBE firm unless the amounts are more favorable for the DBE or unless otherwise approved by the Commission. This form must be submitted with the Bid Proposal or within five (5) business days after bid opening.

END OF DBE INTENT TO SUBCONTRACT

#### **VERIFICATION OF PAYMENTS RECEIVED**

(Date)

Mr. Dawoud Stevenson Disadvantaged Business Enterprise Liaison Officer Savannah Airport Commission 400 Airways Avenue Savannah, GA 31408

RE:	Verification of Payments Received
	FAA AIP No. 3-13-0100-TBD-2020
	SAC Job ID 30596
	Southeast Quadrant Stormwater Drainage Improvements

Dear Sir:

This letter is to certify that		(name of	DBE	firm) has
received \$	(dollar	amount)		from
	_ (prime	contractor).	This	amount
represents payment for work performed from	(M/D/Y) t	0		(M/D/Y)
which is% of the total contract amount of \$		·		

Sincerely,

(Type or Print name of person signing letter)

Title

\_\_\_\_\_

\_\_\_\_\_ who after being duly sworn stated his oath that he had read the above

statement and that the same is true and correct.

This \_\_\_\_\_\_, \_\_\_\_,

State of:

Notary Public:

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

# **DBE UTILIZATION FORM**

Project Name:	Southeast Quadrant Stormwater Drainage Improvements, SAC 30596	Pay Request No.	
Contractor (Company):		From:	
Address:		То:	

Subcontractor	Work Item (From Bid Schedule)	Item Detail (Qty, Type, Etc.)	Subcontract Amount	Amount Earned to Date	Amount This Pay Request	Amount Remaining
Signed:			Date:			
Type or Print Name:						
Title:						
Personally appeared before m	e, the Undersigned Authority	/,		who is known	to me to be an official of	the firm of
		who after being duly sworn, st	ated of his oath that he had re	ead the above statement and	that the same is true and	correct.
This day of	,	Notar	y Public:			
State of		My C	ommission Expires:		(Notary	, Seal)

AIP – SAC 30596 – DBE UTILIZATION FORM

#### **CONTRACT**

This AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_\_, 2021, by and between the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, hereinafter designated the Owner, party of the first part, and \_\_\_\_\_\_ of the City of \_\_\_\_\_\_, and State of \_\_\_\_\_\_, hereinafter designated the Contractor, party of the second part,

## WITNESSETH:

THAT THE PARTIES to these presents, each in consideration of the undertakings, promises and agreements on the part of the other, herein contained, have undertaken, promised and agreed, and do hereby undertake, promise, and agree; the party(ies) of the first part for itself, its successors, and assigns, and the party(ies) of the second part for its, itself, and its, their heirs, executors, administrators, successors, and assigns; as follows:

That the party(ies) of the second part in consideration of the sums of money herein specified to be paid by said party of the first part to said party(ies) of the second part, shall and will at its, their own cost and expense furnish all labor, materials, tools, and equipment to construct **Southeast Quadrant Stormwater Drainage Improvements, SAC Job ID 30596** at the Savannah/Hilton Head International Airport, in accordance with:

- The Plans;
- The Specifications, Bidding and Contract Requirements, General Conditions, and Supplementary General Conditions;
- All Addenda, issued prior to opening of Bids;

all therein referred to as the Contract Documents, are hereby made a part of this Contract, all of said work to be fully completed to the acceptance of and by the Mayor and Aldermen of the City of Savannah, and the Savannah Airport Commission in the amount of Dollars/Cents (\$ ).

If the Contractor fails to comply with any of the terms, conditions, provisions, or stipulations of this Contract, according to the true intent and meaning thereof, then the party of the first part may avail itself of any or all remedies provided in that behalf in the Contract and shall have the right and power to proceed in accordance with the provisions thereof.

That the Contractor shall commence the Work within ten (10) days of the date set by the Owner in a written Notice-To-Proceed and shall substantially complete all work under this Contract within <u>344 calendar days</u> after the date shown in the Notice-To-Proceed.

The Owner hereby agrees to pay to the Contractor for the said work the price set forth in the BID SCHEDULE, at the times and manner set forth in the Contract Documents. Payments to the Contractor by the Owner shall be made upon presentation of the proper certificates to the Owner and upon terms set forth in the Contract Documents.

It is mutually agreed between the parties hereto that time is the essence of this Contract, and in the event the Construction is not substantially complete by the date specified below in COLUMN I of the CONSTRUCTION SCHEDULE, it is agreed that from any money due or to become due the Contractor or his Surety, the Owner may retain the dollar amount shown below in COLUMN II per day for each calendar day thereafter, Sundays and Holidays included, that the work remains incomplete, not as a penalty but as liquidation of a reasonable portion of damages that will be incurred by the Owner by failure of the Contractor to complete the work within the times stipulated:

	COLUMN I	COLUMN II
	Total Calendar Days Allowed	Liquidated Damages per Calendar
	After Notice-to-Proceed	Day if Not Completed by Calendar
		Days Shown in Column I
Mobilization	30	\$1000
Phase 1	150	\$1000
Phase 2	60	\$2000
Phase 3	150	\$1000
Substantial Completion	14	\$1000
Entire Project	344	\$2000

#### CONSTRUCTION SCHEDULE

It is further mutually agreed between the parties hereto that if, at any time after the execution of the Agreement (including the various guarantee periods thereunder) and the Surety Bonds hereto attached, the Owner shall deem the surety or sureties upon such bond or bonds to be unsatisfactory, or if, for any reason, such bond or bonds cease to be adequate to cover the performance of the work or the prompt payment for said labor, materials, supplies and services, the Contractor shall, at his own expense within five (5) days from the date of written notice from the Owner to do so, furnish additional bond or bonds in such form and amount, and with such surety or sureties, as shall be satisfactory to the Owner. In such event, no further payment to the Contractor shall be deemed due under this Agreement until such new or additional bond or bonds are furnished in a manner and form satisfactory to the Owner.

Buy American Clause – Steel and Manufactured Products for Construction Contracts; the Contractor shall deliver only domestic steel and manufactured projects under this contract, as defined below:

The following terms apply to this Clause:

- Steel and Manufactured Products: As used in this clause, steel and manufactured products include, (1) those produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60-percent (60%) of the cost of all its components and final assembly has take place in the United States.
- Components: As used in this clause, components mean those articles, materials, and supplied incorporated directly into steel and manufactured products.
- Cost of Components: The means the cost for production of the components, exclusive of final assembly labor costs.

IN WITNESS WHEREOF, the parties to the agreement have hereunto set their hands and seals and have executed this agreement the day and year first above written.

	<b>OWNER</b> (Party of the Fi	rst Part)	SAVANNAH A	AIRPOI	<u>RT COMMISSI</u>	<u>ON</u>
		BY:	Stephen S. Gre	en, Cha	irman	
(Seal)		ATTEST:	Gregory B. Kel	lly, Seci	retary	
	<b>CONTRACTO</b> (Party of the Set					
			Company Nam	e		
		BY:	Name (Signatu	re)		
		TITLE:	Title			
(Seal)			Name (Print/Ty	ype)		
		ATTEST:	Name (Signatu	re)		
		TITLE:	Title			
(Seal)			Name (Print/Ty	ype)		
	t indicate whether		Corporation:		Partnership:	
corporation, Pa or Individual	urtnership, Compa	ny	Company:		Individual:	
handwriting sig name, his own Where the perse is other than the he must, by affi show his author	ning shall in his own in the principal's name, and his title on signing for a co e President or Vice (davit, as containe rity to bind the con is required for all	e. orporation e President, d herein,	tax registration n		nust affix Georgi	a

# **END OF CONTRACT**

#### PAYMENT BOND

KNC	OW ALL MEN	BY THESI	E PRESENTS:	that			, as
Principal,	hereinafter	called	Contractor,	and			
						as S	urety,
hereinafter o	called Surety, ar	e held and f	firmly bound ur	to the M	ayor and Alderm	ien of the C	ity of
Savannah, C	Beorgia and the S	Savannah Ai	irport Commissi	ion as Ob	ligee, hereinafter	called Owr	ner, in
the	amount		of				
						d	lollars
(\$		) for	the payment	of which	ch Contractor a	and Surety	bind
themselves,	their heirs, exe	cutors, adm	inistrators, succ	cessors, a	nd assigns, joint	tly and seve	erally,
firmly by the	ese presents.						

WHEREAS, Contractor has by written agreement dated \_\_\_\_\_\_\_, 2021 entered into a Contract with Owner to construct Southeast Quadrant Stormwater Drainage Improvements, SAC Job ID 30596 at the Savannah/Hilton Head International Airport in accordance with all of the Contract Documents consisting of the Plans and Specifications, and all addenda or other revisions prepared by the Savannah Airport Commission, which Contract is be reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, the conditions of the above obligation is such that if the said Contractor shall well and faithfully perform the things agreed by him to be done and performed according to the terms of said Contract, and shall promptly make payments to all persons supplying labor, material, and supplies used directly or indirectly by the said Contractor, or subcontractor(s), in the prosecution of the work provided for in said Contract, we agreeing and assenting that this undertaking shall be for the benefit of any subcontractor, material men, or laborer having a just claim, as well as for the Obligee herein, then this obligation shall be void, otherwise, the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said Contract or on or to the plans and specifications therefor shall in any way affect the obligation of said Surety or its Bond.

The said Surety shall inform the Owner thirty (30) days prior to expiration of this bond, by giving notice by registered mail.

Signed and sealed this	_ day of _				, <u>2021</u> .	
Contractor must indicate whether Corporation, Partnership, Company or Individual		Corpora Compan			Partnership: Individual:	
The person signing shall, in his own handwriting, sign the principal's name, his own name and his title. Where a		-	-		ire)	
person signing for a corporation is other than the President or Vice President, he must, by affidavit as contained herein, show his authority to bind the corporation.			Name	(Print/T	ype)	
-						
(Affix Contractor's Corporate Seal)	ATTE	ST BY:	Name	(Signatu		
			Ivanic	(Signatt	ne)	
			Name	(Print/T	ype)	
		TITLE:				
(Affix Surety's Corporate Seal)						
			Surety	,		
		BY:	Name	(Signatu	ire)	
			Name	(Print/T	ype)	
COUNTERSIGNED:						
			Georg	ia Resid	ent Agent	
			Georg	ia Resid	ent Agent (Prin	t/Type)
			Georg	ia Licen	se Number	

(Attach "BOND AFFIDAVIT" on copy of form bound in these specifications)

# END OF PAYMENT BOND

## PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that, a	IS
rincipal, hereinafter called Contractor, and, a	as
urety, hereinafter called Surety, are held and firmly bound unto the Mayor and Aldermen of the	e
ity of Savannah, Georgia, and the Savannah Airport Commission as Obligee, hereinafter called	
Dwner, in the amount of dolla	rs
§) for the payment of which Contractor and Surety bind themselves	,
neir heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by the	se
resents.	

WHEREAS, Contractor has by written agreement dated \_\_\_\_\_\_, <u>2021</u> entered into a Contract with Owner to construct **Southeast Quadrant Stormwater Drainage Improvements, SAC Job ID 30596** at Savannah/Hilton Head International Airport in accordance with all of the Contract Documents consisting of the Plans and Specifications, and all addenda or other revisions prepared by the Savannah Airport Commission which Contract is by reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of the above obligation is such that if the said Contractor shall well and faithfully perform the things agreed by him to be done and performed according to the terms of said Contract, and shall promptly make payments to all persons supplying labor, material, and supplies used directly or indirectly by the said Contractor, or subcontractor(s), in the prosecution of the work provided for in said Contract, we agreeing and assenting that this undertaking shall be for the benefit of any subcontractor, material men, or laborer having a just claim, as well as for the Obligee herein, then this obligation shall be void, otherwise, the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said Contract or on or to the plans and specifications therefor shall in any way affect the obligation of said Surety or its Bond.

The said Surety further stipulates and agrees that in the event of a default or deficiency on the part of the Contractor amounting to a breach of the Contract, the Owner may, by giving notice by registered mail to Contractor and Surety, require that such default or deficiencies be remedied within ten (10) days from the date of such notice. Failure so to remedy or to take proper steps to remedy such defaults or deficiencies within said period shall be cause for the Owner to require that Surety take over and prosecute the work under the Contract and to take over all obligations pertaining thereto. In the event the work under the Contract is taken over by the Surety in a manner satisfactory to the Owner, the Owner will pay to the Surety henceforth all amounts due and to become due under the Contract, including amendments, less the balance of the Contract price previously paid to the Contractor and less liquidated damages, if assessed. The Owner shall not be liable for any monies not due on the Contract and shall not be made a party to any dispute between Contractor and Surety.

If the Surety does not take over the work in a satisfactory manner within ten (10) days after the notice of default or does not proceed with completing the work in accordance with the Contract, the Owner shall have full power and authority, without impairing the obligation of the Contract or the Contract Bond, to take over the completion of the work; to appropriate or use any or all material and equipment that may be suitable; to enter into agreements and provisions thereof; or to use such other methods as may be required for completion of the Contract. The Contractor and his Surety shall be liable for all costs incurred by the Owner in completing the work and for all liquidated damages in conformity with the terms of the Contract. If the sum of such liquidated damages and the expense so incurred by the Owner is less than the sum which would have been payable under this Contract if it had been completed by the Contractor or his Surety, the Contractor or his Surety shall be entitled to receive the difference; and if the sum of such expense and such liquidated damages exceeds the sum which would have been payable under the Contract, the Contractor and his Surety shall be liable and shall pay to the Owner the amount of such excess. Notice to the Contractor shall be deemed to have been served when delivered to the man in charge of any office used by the Contractor, his representative at or near the work, or by registered mail addressed to the Contractor at his last known place of business.

The said Surety further stipulates and agrees that this bond is also given and made as a guarantee insuring the Owner against loss resulting from costs of repairing, replacing, or reconstructing any portion of the work performed or equipment furnished under the Contract, because of failure to perform as specified or from being defective in any manner whatsoever. This bond shall remain in full force and effect for a period of one year after the date of written recommendation and of acceptance by the Owner.

The said Surety shall inform the Owner thirty (30) days prior to expiration of this bond, by giving notice by registered mail.

Signed and sealed this	_day of _				, <u>2021</u> .			
Contractor must indicate whether Corporation, Partnership, Company		Corporat			Partnership: Individual:			
or Individual The person signing shall, in his own handwriting, sign the principal's name, his own name and his title. Where a person signing for a corporation is other than the President or		Compan BY:	-	G (Signate				
Vice President, he must, by affidavit as contained herein, show his authority to bind the corporation.		TITLE:	Name (Print/Type)					
(Affix Contractor's Corporate Seal)								
	ATTES	ST BY:	Name	(Signat	ure)			
		TITLE:		(Print/T	'ype)			
(Affix Surety's Corporate Seal)								
			Surety	7				
		BY:	~~~~~					
		DI.	Name	(Signat	ure)			
			Name	(Print/T	'ype)			
COUNTERSIGNED:								
			Georg	ia Resid	ent Agent			
			Georg	ia Resid	ent Agent (Prin	t/Type)		
			Georg	ia Licen	se Number			
(Attach "BOND AFFI	DAVIT" d	on copy o	f form	bound	in these specific	cations)		

# END OF PERFORMANCE BOND

# **BOND AFFIDAVIT**

State of:		
County of:		
Before me, the undersigned a	uthority, personally appeare	d,
who, being duly sworn, deposes and	• • • • • •	
insurance agent, properly licensed ur	•	
the State of Georgia, to represent		
corporate surety bonds under the law		
	-	fies that as Attorney-in-fact for the
said		
(US \$)	on behalf of	
covering Savannah/Hilton Head Inte	rnational Airport, AIP Proje	ct No. TBD for the <b>Southeast</b>
Quadrant Stormwater Drainage In		
Commission, Savannah, Georgia.		
Said	further certifies tha	t the premium on the said bond is
		which will be paid in
full direct to him as Attorney-in-fact	, and included in his regular	accounts to the said
		, and that he will
receive his regular commission of (_	%) percent as Attorn	ney-in-fact for the execution of
said Bond and that his commission w	vill not be divided with anyo	ne except as follows:
percent to	(company name)	), who is duly authorized resident
insurance agent and properly license	d under the laws of the State	of Georgia.
COUNTERSIGNED:		
Agent and Attorney-in-fact	Georgia Resident Agent	Georgia License Number
Acknowledgement for Attorney-in-fact:		
Sworn to and subscribed before me this	day of	2021
	day of	, <u>2021</u>
		Notary Public,
	State of	
	My Commission expires	
न	ND OF BOND AFFIDAVIT	

# GENERAL CONTRACT PROVISIONS

# SAVANNAH AIRPORT COMMISSION

Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS AC 150/5370-10H

#### **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.
10-08	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 10-13	Calendar Day Certificate of Analysis (COA)	Every day shown on the calendar. The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.

Paragraph Number	Term	Definition
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 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.

Paragraph Number	Term	Definition
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, and/or observation of the contract work and acting directly or through an authorized representative <i>of the Owner</i> .
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 to be necessary to complete the work within the intended scope of the contract 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	<b>a.</b> Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis.
		<b>b.</b> Owner Force Account - Work performed for the project by the Owner's employees.
10-31	Intention of Terms	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 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, subject in each case to the final determination of the Owner. 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
10-32	Lighting	entire section, specification item, or cited standard that may be pertinent to such specific reference.
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,

Paragraph Number	Term	Definition
		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 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 <i>SAVANNAH AIRPORT COMMISSION</i> .
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 and furnish the necessary materials in accordance with the provisions of the plans and specifications.

Paragraph Number	Term	Definition
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 <i>Owner</i> 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.
10-50	Resident Project Representative (RPR)	The Owner or individual authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or being furnished by the Contractor.
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.
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

Paragraph Number	Term	Definition
		instructions from the <i>Owner</i> , 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.
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 and/or notes	The Standard FAA Specifications herein refer to Resident Project Representative (RPR) throughout. It is understood that the RPR is an individual employed by the Savannah Airport Commission with reporting responsibilities through the Director of Engineering to the Executive Director. All construction related decisions are the responsibility of the Director of Engineering and the RPR is the conduit to that office.

# **END OF SECTION 10**

#### SECTION 20 PROPOSAL REQUIREMENTS & CONDITIONS

#### 20-01 Advertisement (Notice to Bidders). See Bidding Requirements, Section 1

**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.

Unless otherwise specified, a bidder may submit evidence that they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

Each bidder shall submit "evidence of competency" and "evidence of financial responsibility" to the Owner at the time of bid opening.

**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 pre-bid conference is 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.

**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 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 seven (7) 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.

#### 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 thirty (**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.

#### For AIP contracts, unless otherwise specified in this subsection, no award shall be made until the FAA has reviewed the Owner's recommendation to make such award in accordance with 2 CFR 200.324.

**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.

#### **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. The Contractor shall maintain traffic in the manner detailed in the Construction Safety and Phasing Plan (CSPP).

**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 in accordance with the construction safety and phasing plan (CSPP) and the safety plan compliance document (SPCD).

**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) (<u>http://mutcd.fhwa.dot.gov/</u>), 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.

#### SECTION 50 CONTROL OF WORK

**50-01** Authority of the Resident Project Representative (RPR). On this assignment, RPR and Engineer are *interchangeable descriptions*. 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.

**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; plans shall govern over conflict with General Provisions or Technical Specifications, the Special Provisions 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. None

**50-05 Cooperation of Contractor**. The Contractor shall be supplied with [five] 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 Engineer/RPR shall establish necessary horizontal and vertical control. 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 established by Engineer/RPR. 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 to the RPR that the Contractor concurs with survey control established for the project. All lines, grades and measurements from control points necessary for the proper execution and control of the work on this project will be provided to the RPR. The Contractor is responsible to establish all layout required for the construction of the project.

Copies of survey notes will be provided to the RPR for each area of construction and for each placement of material as specified to allow the RPR to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be provided to the RPR prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s): **Autocad.** 

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.

**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 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.

#### SECTION 60 CONTROL OF MATERIALS

**60-01 Source of supply and quality requirements.** The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish documentation to the RPR as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the RPR's option, materials may be approved at the source of supply before delivery. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

**60-02 Samples, tests, and cited specifications**. All materials used in the work shall be inspected, tested, and approved by the RPR before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the RPR shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the RPR, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the RPR. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the RPR.

A copy of all Contractor QC test data shall be provided to the RPR daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the RPR showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

The Contractor shall employ a Quality Control (QC) testing organization to perform all Contractor required QC tests in accordance with Item C-100 Contractor Quality Control Program (CQCP).

**60-03 Certification of compliance/analysis (COC/COA)**. The RPR may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's COC stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified. The COA is the manufacturer's COC and includes all applicable test results.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the RPR.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "or equal," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

a. Conformance to the specified performance, testing, quality or dimensional requirements; and,

**b.** Suitability of the material or assembly for the use intended in the contract work.

The RPR shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The RPR reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

**60-04 Plant inspection**. The RPR or their authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for acceptance of the material or assembly.

Should the RPR conduct plant inspections, the following conditions shall exist:

**a.** The RPR shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.

**b.** The RPR shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

**c.** If required by the RPR, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The RPR shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

#### 60-05 Engineer/ Resident Project Representative (RPR) field office. NOT USED.

**60-06 Storage of materials**. Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the RPR. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans and/or CSPP, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the RPR. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the RPR a copy of the property Owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at their expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

**60-07 Unacceptable materials**. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the RPR.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the RPR has approved its use in the work.

**60-08 Owner furnished materials**. The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Ownerfurnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

#### SECTION 70 LEGAL REGULATIONS & RESPONSIBILITY TO PUBLIC

**70-01 Laws to be observed**. The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all their officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

**70-02 Permits, licenses, and taxes**. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

**70-03 Patented devices, materials, and processes.** If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

**70-04 Restoration of surfaces disturbed by others**. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the Owner, such authorized work (by others) is indicated on the drawings.

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the RPR.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the RPR, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

**70-05 Federal Participation**. The United States Government has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator. No requirement of this contract shall be construed as making the United States a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

**70-06 Sanitary, health, and safety provisions**. The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

**70-07 Public convenience and safety**. The Contractor shall control their operations and those of their subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, paragraph 80-04, *Limitation of Operations*.

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The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the RPR. If the RPR determines the existence of Contractor debris in the work site represents a hazard to airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the RPR reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor.

**70-08 Construction Safety and Phasing Plan (CSPP).** The Contractor shall complete the work in accordance with the approved Construction Safety and Phasing Plan (CSPP) developed in accordance with AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP is *a separate document provided with the bid documents*.

**70-09 Use of explosives**. When the use of explosives is necessary for the execution of the work, the Contractor shall exercise the utmost care not to endanger life or property, including new work. The Contractor shall be responsible for all damage resulting from the use of explosives.

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the RPR and, in general, not closer than 1,000 feet (300 m) from the work or from any building, road, or other place of human occupancy.

The Contractor shall notify each property Owner and public utility company having structures or facilities in proximity to the site of the work of their intention to use explosives. Such notice shall be given sufficiently in advance to enable them to take such steps as they may deem necessary to protect their property from injury.

The use of electrical blasting caps shall not be permitted on or within 1,000 feet (300 m) of the airport property.

**70-10 Protection and restoration of property and landscape**. The Contractor shall be responsible for the preservation of all public and private property and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer/RPR has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at their expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

**70-11 Responsibility for damage claims**. The Contractor shall indemnify and hold harmless the Engineer/RPR and the Owner and their officers, agents, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

**70-12 Third party beneficiary clause**. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third-party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

**70-13 Opening sections of the work to traffic.** If it is necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.

Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, paragraph 50-14, *Partial Acceptance*.

No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the RPR, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at their expense.

The Contractor shall make their own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

The Contractor must conform to safety standards contained AC 150/5370-2 and the approved CSPP.

Contractor shall refer to the plans, specifications, and the approved CSPP to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to opening up sections of work to traffic.

**70-14 Contractor's responsibility for work.** Until the RPR's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, paragraph 50-14, *Partial Acceptance*, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at their own expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

**70-15** Contractor's responsibility for utility service and facilities of others. As provided in paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and/or in the contract documents.

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

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It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of their plan of operations. Such notification shall be in writing addressed to "The Person to Contact" as provided in this paragraph and paragraph 70-04, *Restoration of Surfaces Disturbed By Others*. A copy of each notification shall be given to the RPR.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's "Person to Contact" no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the RPR.

The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the RPR and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the RPR continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or their own surety.

**70-15.1 FAA facilities and cable runs**. The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the execution of the project work, shall comply with the following:

**a.** The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.

**b.** The Contractor shall provide notice to the FAA Air Traffic Organization (ATO)/Technical Operations/System Support Center (SSC) Point-of-Contact through the airport Owner a minimum of seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.

**c.** If execution of the project work requires a facility outage, the Contractor shall contact the FAA Point-of-Contact a minimum of 72 hours prior to the time of the required outage.

**d.** Any damage to FAA cables, access roads, or FAA facilities during construction caused by the Contractor's equipment or personnel whether by negligence or accident will require the Contractor to repair or replace the damaged cables, access road, or FAA facilities to FAA requirements. The Contractor shall not bear the cost to repair damage to underground facilities or utilities improperly located by the FAA.

**e.** If the project work requires the cutting or splicing of FAA owned cables, the FAA Point-of-Contact shall be contacted a minimum of 72 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA specifications and require approval by the FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

**70-16 Furnishing rights-of-way**. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

**70-17 Personal liability of public officials**. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, RPR, their authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

**70-18** No waiver of legal rights. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

**70-19 Environmental protection**. The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, asphalts, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

**70-20** Archaeological and historical findings. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during their operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the RPR. The RPR will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract change order or supplemental agreement as provided in Section 40, paragraph 40-04, *Extra Work*, and Section 90, paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, paragraph 80-07, *Determination and Extension of Contract Time*.

70-21 Insurance Requirements. Insurance requirements are included in the Supplementary General Conditions.

#### 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).

The Contractor shall perform, with his organization, an amount of work equal to at least 25 percent of the total contract cost.

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.

# The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

**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 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 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.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), 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) 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 *indicated on the drawings*.

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 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 days or the number of 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:

**a.** 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.

**b.** The RPR will not make charges against the contract time prior to the effective date of the notice to proceed.

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

**d.** 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*.

**e.** 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.

**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-workdays. 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.

**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. Construction Time and Liquidated Damages are included within the Supplemental General Conditions.

The maximum construction time allowed will be the sum of the time allowed for individual schedules. 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 wavier 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.

#### 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.

Term	Description	
Excavation and Embankment Volume	In computing volumes of excavation, the average end area method will be used unless otherwise specified.	
Measurement and Proportion by Weight	and The term "ton" will mean the short ton consisting of 2,000 pounds (907 km) avoirdupo All materials that are measured or proportioned by weights shall be weighed on accurat independently certified scales by competent, qualified personnel at locations designate by the RPR. If material is shipped by rail, the car weight may be accepted provided the only the actual weight of material is paid for. However, car weights will not 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 direct and each truck shall bear a plainly legible identification mark.	
Measurement by Volume	by Materials to be measured by volume in the hauling vehicle shall be hauled in approve 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.	
Asphalt Material	Asphalt materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at $60^{\circ}$ F ( $16^{\circ}$ C) or will be corrected to the volume at $60^{\circ}$ F ( $16^{\circ}$ 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 and Payment Terms**

Term	Description		
	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.		
Cement	Cement will be measured by the ton (kg) or hundredweight (km).		
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	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.		
	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.		
	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%.		
	In the event inspection reveals the scales have been under-weighing (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.		
	Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the RPR can safely and conveniently view them.		
	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.		
	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		

Term	Description	
	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.	
Rental Equipment	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> .	
Pay Quantities	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 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 Payment for extra work**. Extra work, performed in accordance with Section 40, paragraph 40-04, *Extra Work*, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

**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, 10% percent 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 TEN (10) 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 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.

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- j. Project Operation and Maintenance (O&M) Manual(s).
- k. Security for Construction Warranty.
- l. Equipment commissioning documentation submitted, if required.

## PERIODIC PAY AFFIDAVIT

#### CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS, CLAIMS AND RELEASE OF LIENS.

Whereas a contract was entered into on \_\_\_\_\_\_, <u>2021</u> between the Savannah Airport Commission and \_\_\_\_\_\_ for construction of **SOUTHEAST QUADRANT STORMWATER DRAINAGE IMPROVEMENTS, SAC JOB ID 30596.** 

The undersigned hereby certifies that all work under the above contract has been performed in accordance with the terms thereof, that all material suppliers, subcontractors, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character including disputed claims or any claims to which the contractor/party has or will asset any defense arising out of their performance of the contract which have not been paid and satisfied in full

The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damaged of any kind, nature or description which might constitute a lien upon the property of the Owner.

The undersigned makes this affidavit as provided by law for the purpose of receiving payment for work performed during this contract of all claims against the Owner arising under or by virtue of this contract. Acceptance of such payment is acknowledged as a release of the Owner from any and all claims arising under or by virtue of this contract.

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State of					
My Commission	expires				

## FINAL PAY AFFIDAVIT

#### CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS, CLAIMS AND RELEASE OF LIENS

Whereas a contract was entered into on \_\_\_\_\_\_, 2021 between the Savannah Airport Commission and \_\_\_\_\_\_ for construction of SOUTHEAST QUADRANT STORMWATER DRAINAGE IMPROVEMENTS, SAC JOB ID 30596.

The undersigned thereby certifies that all work under the above contract has been performed in accordance with the terms thereof, that all material suppliers, subcontractors, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character including disputed claims or any claims to which the contractor/party has or will asset any defense arising out of the performance of the contract which have not been paid and satisfied in full.

The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature or description which might constitute a lien upon the property of the owner.

The undersigned makes this affidavit as provided by law for the purpose of receiving final payment in full settlement for work performed during the contract of all claims against the owner arising under or by virtue of this contract. Acceptance of such payment is acknowledged as a release of the owner from any and all claims arising under or by virtue of this contract.

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Signature	
Title	
Company	
Personally appeared before me, the Undersigned Authority,	who is he had read the above
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Notary Public,	
State of	
My Commission expires	

## **END OF SECTION 90**



FAA Airports

## **Contract Provision Guidelines for Obligated Sponsors and Airport Improvement Program Projects: SECTION 130**

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## **RECORD OF CHANGES**

No.	Date	Item	Change
1	1/29/2016	Entire Document	Re-structured document to enhance user understanding of use and applicability; added suggested provisions for "Termination for Cause", "Recovered Materials", "Seismic Safety".
2	6/10/2016	Table 1	Distracted Driving: Updated "Dollar Threshold" to \$3,500 to reflect current micro-purchase threshold.
3	6/10/2016	A2, Affirmative Action	Update the reference to the Department of Labor online document to be "Participation Goals for Minority and Females"
		A12, Disadvantaged	A12.3: Changed Title to "Required Provisions"
		Business Enterprise	A12.3.1: Corrected starting timeframe for submitting written confirmation from "Owner Notice of Award" to "bid opening"
			A12.3.1: Provided two sets of last paragraphs to reflect change (7 days to 5 days) that occurs on December 31, 2016.
			A12.3.2: Moved Race/Gender Neutral language up and renamed heading to reflect text is solicitation language.
			A12.3.3: Moved and renamed contract clause information and clarified it is for prime contract covered by a DBE program.
5	12/12/2017	Cover	Change title of document for clarity
6	12/12/2017	1. Purpose of this Document	Added clarifying text addressing purpose and limitations of this guidance.
			1.7-1.9: Added definitions of contract, applicant, bid
7	12/12/2017	2. Sponsor requirements	Added clarifying text addressing sponsor responsibilities.

No.	Date	Item	Change
8	12/12/2017	3. Typical Procurement Steps	Added clarifying text for typical procurement process steps.
9	12/12/2017	Table 1 –	Re-arranged table in alphabetic order.
		Applicability Matrix	Added "Solicitation" column to address solicitation provisions
			Item 1, Seismic Safety: Added Limited Application
			Added note on Airport Concessions Disadvantaged Business Enterprises
10	12/12/2017	All Clauses	Clarifying revisions made to applicability section.
11	12/12/2017	A5, Civil Rights - General	Rephrased General Civil Rights Provision to simplify language and to clarify duration of obligation for tenant/concessionaire/lessee
12	12/12/2017	A6.3.1 Civil Rights – Solicitations	Added sponsor must select either DBE or ACDBE
12	12/12/2017	A12, Disadvantaged Business Enterprise	The deadline to submit DBE confirmation of participation is now 5 days after bid opening or as a matter of bid responsiveness.
			Updated DBE contract assurance (12.3.3) to match language of 49 CFR § 26.13
13	12/12/2017	A24, Tax Delinquency and Felony Conviction	New certification addressing contractor tax delinquency and felony conviction.
14	6/19/2018	6.2.1, Applicability of Title VI Solicitation Notice	For Title VI Clauses for Compliance with Nondiscrimination Requirements, change second sentence in second column to changed "are already subject to nondiscrimination requirements" to "are <b>not</b> already subject to nondiscrimination requirements".
15	6/19/2018	A6.4.1, Title VI Clauses for Compliance with Nondiscrimination Requirements	In second item, changed "are already subject to nondiscrimination requirements" to "are <b>not</b> already subject to nondiscrimination requirements".

# **CONTRACT GUIDANCE**

#### 1. Purpose of this Document

- The purpose of this document is to establish a convenient resource for Sponsors that consolidates all possible provisions and clauses into one document that includes an applicability matrix. This document itself does not create, revise or delete requirements for participation in the Airport Improvement Program. The source of requirements addressed within this document are identified within the section for each individual clause.
- 2) Federal laws and regulations require that an sponsor (a recipient of federal assistance) include specific clauses in certain contracts, solicitations, or specifications regardless of whether or not the project is federally funded.
- 3) The term **sponsor** is used in this document to mean either an obligated sponsor on a project that is not federally funded, or a sponsor on an AIP funded project.
- 4) The term *Owner* is generally used in the solicitation or contract clauses because of its common use in public contracts.
- 5) An Owner becomes an obligated sponsor upon acceptance of the Airport Improvement Program (AIP) grant assurances associated with current or prior AIP grant funded projects.
- 6) For purposes of determining requirements for contract provisions, the term *contract* includes subcontracts and supplier contracts such as purchase orders.
- 7) For purpose of remaining compliant with its obligations, a sponsor must incorporate applicable contract provisions in all its procurements and contract documents. Unless otherwise stated, these provisions flow down to subcontracts and sub-tier agreements.
- 8) The term **contractor** is understood to mean a contractor, subcontractor, or consultant; and means one who participates, through a contract or subcontract (at any tier).
- 9) The term **bid** is understood to mean a bid, an offer, or a proposal.
- 10) Applicant:
  - a. For the Equal Employment Opportunity (EEO) clause, the term **applicant** means an applicant for employment (whether or not the phrase, *for employment*, follows the word applicant or applicants).
  - b. For all other clauses, the term **applicant** means a bidder, offeror, or proposer for a contract.

#### 2. Sponsor Requirements

In general, the sponsor must take the following actions in order to remain consistent with its obligations:

- 1) Include in its procurements the provisions that are applicable to its project.
- 2) Not incorporate the entire contract provisions guidelines in its solicitation or contract documents, whether by reference or by inclusion in whole. Incorporation of this entire guidance document creates potential for ambiguous interpretation and may lead to improper application that

unnecessarily increases price. A sponsor that fails to properly incorporate applicable contract clauses may place themselves at risk for audit findings or denial of Federal funding.

- 3) Incorporate applicable contract provisions using mandatory language as required. The subheading entitled *Applicability* advises whether a particular clause or provision has mandatory language that a sponsor must use.
  - (a) Mandatory Language Whenever a clause or provision has mandatory text, the sponsor must incorporate the text of the provision **without change**, except where specific adaptive input is necessary (e.g. such as the sponsor's name).
  - (b) No Mandatory Language Provided For provisions without mandatory language, this guidance provides model language acceptable to the FAA. Some sponsors may already have standard procurement language that is equivalent to those federal provisions. In these cases, sponsors may use their existing standard procurement provision language provided the text meets the intent and purpose of the Federal law or regulation.
- 4) Require the contractor (including all subcontractors) to insert these contract provisions in each lower tier contract (e.g. subcontract or sub-agreement).
- 5) Require the contractor (including all subcontractors) to incorporate the applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services.
- 6) Require that the prime contractor be responsible for compliance with these contract provisions by any subcontractor, lower-tier subcontractor or service provider.
- 7) Verify that any required local or State provision does not conflict with or alter a Federal law or regulation.

#### 3. Typical Procurement Steps

The usual procurement steps in a project are:

- 1) Solicitation, Request for Bids or Request for Proposals This is also called the Advertisement or Notice to Bidders.
- 2) Bidding or Accepting Proposals In this stage, the bidders receive a complete set of the procurement documents, also known as the project manual. The project manual will typically include a copy of the solicitation, instructions-to-bidders, bid forms, certifications and representations, general provisions, contract conditions, copy of contract, project drawings, technical specifications and related project documents.
- 3) Bid/Proposal Evaluation Period when Sponsor tabulates and reviews all proposals for bid responsiveness and bidder responsibility.
- 4) Award Point when the Sponsor formally awards the contract to the successful bidder.
- 5) Execution of Contract Point at which the Sponsor formally enters into a legally binding agreement to perform services or provide goods.

## 4. Applicability Matrix for Contract Provisions

<u>Table 1</u> summarizes the applicability of contract provisions based upon the type of contract or agreement. The dollar threshold represents the value at which, when equal to or exceeded, the sponsor must incorporate the provision in the contract or agreement.

Supplemental information addressing applicability and use for each provision is located in Appendix A. Appendix A and the Matrix include notes indicating when the sponsor may incorporate references in the **solicitation** in lieu of including the entire text.

#### Meaning of cell values

- Info –Sponsor has discretion on whether to include clause in its contracts.
- Limited Provision with limited applicability depending on circumstances of the procurement.
- n/a Provision that is not applicable for that procurement type.
- NIS Provision that does not need to be included or referenced in the solicitation document
- REF Provision to be incorporated into the solicitation by reference.
- REQD Provision the sponsor must incorporate into procurement documents.

 Table 1 – Applicability of Provisions

Provisions/Clauses	Dollar Threshold	Solicitation	<b>Professional</b> Services	Construction	Equipment	Property (Land)	Non-AIP Contracts
Access to Records and Reports	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a
Affirmative Action Requirement	\$10,000	REQD	Limited	REQD	Limited	Limited	n/a
Breach of Contract	\$150,000	NIS	REQD	REQD	REQD	REQD	n/a
Buy American Preferences	\$ 0	REF	Limited	REQD	REQD	Limited	n/a
(1) Buy American Statement	\$ 0	NIS	Limited	REQD	REQD	Limited	n/a
(2) <u>BA – Total Facility</u>	\$ 0	NIS	Limited	REQD	REQD	Limited	n/a
(3) B.A. – Manufactured Product	\$ 0	NIS	Limited	REQD	REQD	Limited	n/a
Civil Rights – General	\$ 0	NIS	REQD	REQD	REQD	REQD	REQD
Civil Rights - Title VI Assurances	\$ 0	REF	REQD	REQD	REQD	REQD	REQD
(1) Notice - Solicitation	\$ 0	REQD	REQD	REQD	REQD	REQD	REQD
(2) <u>Clause - Contracts</u>	\$ 0	NIS	REQD	REQD	REQD	REQD	REQD
(3) <u>Clause – Transfer of U.S. Property</u>	\$ 0	NIS	n/a	n/a	n/a	Limited	REQD
(4) Clause – Transfer of Real Property	\$ 0	NIS	n/a	n/a	n/a	REQD	REQD
(5) Clause - Construct/Use/Access to	\$ 0	NIS	n/a	n/a	n/a	REQD	REQD
Real Property							-
(6) <u>List – Pertinent Authorities</u>	\$0	NIS	REQD	REQD	REQD	REQD	REQD
Clean Air/Water Pollution Control	\$150,000	NIS	REQD	REQD	REQD	REQD	n/a
Contract Work Hours and Safety Standards	\$100,000	NIS	Limited	REQD	Limited	Limited	n/a
Copeland Anti-Kickback	\$ 2,000	NIS	Limited	REQD	Limited	Limited	n/a
Davis Bacon Requirements	\$ 2,000	REF	Limited	REQD	Limited	Limited	n/a
Debarment and Suspension	\$25,000	REF	REQD	REQD	REQD	Limited	n/a
Disadvantaged Business Enterprise	\$ 0	REF	REQD	REQD	REQD	REQD	n/a
Distracted Driving	\$3,500	NIS	REQD	REQD	REQD	REQD	n/a
Energy Conservation Requirements	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a
Equal Employment Opportunity	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
(1) EEO Contract Clause	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
(2) EEO Specification	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
Federal Fair Labor Standards Act	\$ 0	NIS	REQD	REQD	REQD	REQD	Info
Foreign Trade Restriction	\$ 0	REF	REQD	REQD	REQD	REQD	n/a
Lobbying Federal Employees	\$ 100,000	REF	REQD	REQD	REQD	REQD	n/a
Occupational Safety and Health Act	\$ 0	NIS	REQD	REQD	REQD	REQD	Info
Prohibition of Segregated Facilities	\$10,000	NIS	Limited	REQD	Limited	Limited	n/a
Recovered Materials	\$10,000	REF	Limited	REQD	REQD	Limited	n/a
Rights to Inventions	\$ 0	NIS	Limited	Limited	Limited	n/a	n/a
Seismic Safety	\$ 0	NIS	Limited	Limited	Limited	n/a	n/a
Tax Delinquency and Felony Conviction	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a
Termination of Contract	\$10,000	NIS	REQD	REQD	REQD	REQD	n/a
Veteran's Preference	\$ 0	NIS	REQD	REQD	REQD	REQD	n/a

#### Airport Concessions Disadvantage Business Enterprise (ACDBE) Notes:

1. Language relative to solicitation for ACDBEs does not need to be included in AIP funded solicitations, since in no case are concessions activities funded with federal funds.

2. Airport sponsors must include the appropriate Title VI language in their solicitation notices when they seek proposals for concessions.

# APPENDIX A – CONTRACT PROVISIONS

## A1 ACCESS TO RECORDS AND REPORTS

## A1.1 SOURCE

2 CFR § 200.333

2 CFR § 200.336

FAA Order 5100.38

## A1.2 APPLICABILITY

2 CFR § 200.333 requires a sponsor to retain records pertinent to a Federal award for a period of three years from submission of final closure documents. 2 CFR § 200.336 establishes that sponsors must provide Federal entities the right to access records pertinent to the Federal award. FAA policy extends these requirements to the sponsor's contracts and subcontracts of AIP funded projects.

**Contract Types** – The sponsor must include this provision in all contracts and subcontracts of AIP funded projects.

**Use of Provision** – No mandatory language provided. The following language is acceptable to the FAA with meeting the intent of this requirement. If the sponsor prefers to use different language, the sponsor's language must fully satisfy the requirements of \$ 200.333 and 200.336.

# A1.3 CONTRACT CLAUSE

#### ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

# A2 AFFIRMATIVE ACTION REQUIREMENT

## A2.1 SOURCE

41 CFR part 60-4

Executive Order 11246

## A2.2 APPLICABILITY

**Minority Participation.** Sponsors are required to set goals for minority participation in AIP funded projects exceeding \$10,000. The goals for minority participation derive from Economic Area (EA) and Standard Metropolitan Statistical Area (SMSA) as established in Volume 45 of the Federal Register dated 10/3/80. Page 65984 contains a table of all EAs and SMSAs and the associated minority participation goals.

To find the goals for minority participation, a sponsor must either refer to the Federal Register Notice or to the Department of Labor online document, "<u>Participation Goals for Minorities and Females</u>". EAs and SMSAs span state boundaries. A sponsor may have to refer to entries for adjacent states in order to locate the goal for the project location.

**Female Participation.** Executive Order 11246 has set a goal of 6.9% nationally for female participation for all construction projects. This value remains constant for all counties and states.

#### **Contract Types** –

*Construction* – The sponsor must incorporate this notice in all solicitations for bids or requests for proposals for AIP funded construction work contracts and subcontracts that exceed \$10,000. Construction work means construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection and other onsite functions incidental to the actual construction.

*Equipment* – The sponsor must incorporate this notice in any equipment project exceeding \$10,000 that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at a manufacturer's plant (e.g. firefighting and snow removal vehicles).

*Professional Services* – The sponsor must incorporate this notice in any professional service agreement if the professional services agreement includes tasks that meet the definition of construction work [as defined by the U.S. Department of Labor (DOL)] and exceeds \$10,000. Examples include installation of monitoring systems (e.g. noise, environmental, etc.).

*Property/Land* – The sponsor must incorporate this notice in any agreement associated with land acquisition if the agreement includes construction work (defined above) that exceeds \$10,000. Examples include demolition of structures or installation of boundary fencing.

#### Use of Provision – MANDATORY TEXT. The sponsor must:

(a) Incorporate the text of this provision in its solicitations without modification.

- (b) Incorporate the applicable minority participation goal and the covered area by geographic name.
- (c) Not simply insert a reference to the 1980 Federal Register Notice.

## A2.3 SOLICITATION CLAUSE

#### NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

#### Timetables

Goals for minority participation for each trade:

[sponsor must insert established goal]

Goals for female participation in each trade: 6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **City of Savannah**, **County of Chatham**, **State of Georgia**.

## A3 BREACH OF CONTRACT TERMS

## A3.1 SOURCE

#### 2 CFR § 200 Appendix II(A)

## A3.2 APPLICABILITY

This provision requires sponsors to incorporate administrative, contractual or legal remedies if contractor violate or breach contract terms. The sponsor must also include appropriate sanctions and penalties.

**Contract Types** – This provision is required for all contracts that exceed the simplified acquisition threshold as stated in 2 CFR Part 200, Appendix II (A). This threshold is occasionally adjusted for inflation and is now equal to \$150,000.

**Use of Provision** – No mandatory language provided. The following language is acceptable to the FAA as meeting the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of part 200. Select either "contractor" or "consultant" as applicable.

## A3.3 CONTRACT CLAUSE

#### **BREACH OF CONTRACT TERMS**

Any violation or breach of terms of this contract on the part of the *Contractor* or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide *Contractor* written notice that describes the nature of the breach and corrective actions the *Contractor* must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the *Contractor* must correct the breach. Owner may proceed with termination of the contract if the *Contractor* fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

# A4 BUY AMERICAN PREFERENCE

## A4.1 SOURCE

Title 49 USC § 50101

## A4.2 APPLICABILITY

The Buy American Preference requirement in 49 USC § 50101 requires that all steel and manufactured goods used on AIP projects be produced in the United States. The statute gives the FAA the ability to issue a waiver to a sponsor to use non-domestic material on an AIP funded project subject to meeting certain conditions. A sponsor may request that the FAA issue a waiver from the Buy American Preference requirements if the FAA finds that:

- 1) Applying the provision is not in the public interest;
- 2) The steel or manufactured goods are not available in sufficient quantity or quality in the United States;
- 3) The cost of components and subcomponents produced in the United States is more than 60 percent of the total components of a facility or equipment, and final assembly has taken place in the United States. Items that have an FAA standard specification item number (such as specific airport lighting equipment) are considered the equipment.
- 4) Applying this provision would increase the cost of the overall project by more than 25 percent.

**Timing of Waiver Requests.** Sponsors desiring a Type 1 or Type 2 waiver must submit their waiver requests *before* issuing a solicitation for bids or a request for proposal for a project.

The sponsor must submit Type 3 or Type 4 waiver requests *prior* to executing the contract. The FAA will generally not consider waiver requests after execution of the contract except where extraordinary and extenuating circumstances exist. The FAA cannot review waiver requests with incomplete information. Sponsors must assess the adequacy of the waiver request and associated information prior to forwarding a waiver request to the FAA for action.

**Buy American Conformance List.** The FAA Office of Airports maintains a listing of equipment that has received a nationwide waiver from the Buy American Preference requirements or that fully meet the Buy American requirements. The Nationwide Buy American Waiver List is available online at <a href="http://www.faa.gov/airports/aip/buy\_american/">www.faa.gov/airports/aip/buy\_american/</a>. Products listed on the Buy American Conformance list do not require additional submittal of domestic content information under a project specific Buy American Preference waiver.

**Facility Waiver Requests.** For construction of a facility, the sponsor may submit the waiver request after bid opening, but prior to contract execution. Examples of facility construction include terminal buildings, terminal renovation, and snow removal equipment buildings.

#### **Contract Types** –

*Construction and Equipment* – The sponsor must meet the Buy American Preference requirements of 49 USC § 50101 for all AIP funded projects that require steel or manufactured goods. The Buy America requirements flow down from the sponsor to first tier contractors, who are responsible for ensuring that lower tier contractors and subcontractors are also in compliance.

Note: The Buy American Preference does not apply to equipment a contractor uses as a tool of its trade and which does not remain as part of the project.

*Professional Services* – Professional service agreements (PSAs) do not normally result in a deliverable that meets the definition of a manufactured product. However, the emergence of various project delivery methods has created situations where task deliverables under a PSA may include a manufactured product. If a PSA includes providing a manufactured good as a deliverable under the contract, the sponsor must include the Buy American Preference provision in the agreement.

*Property* – Most land transactions do not involve acquiring a manufactured product. However, under certain circumstances, a property acquisition project could result in the installation of a manufactured product. For example, the installation of property fencing, gates, doors and locks, etc. represent manufactured products acquired under an AIP funded land project that must comply with Buy American Preferences.

**Use of Provision** – No mandatory language provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully comply with 49 USC § 50101.

There are two types of Buy American certifications. The sponsor must incorporate the appropriate "Certificate of Buy America Compliance" in the solicitation:

- Projects for a facility (buildings such as terminals, snow removal equipment (SRE) buildings, aircraft rescue and firefighting (ARFF) buildings, etc.) Insert the Certificate of Compliance Based on Total Facility.
- Projects for non-facility development (non-building construction projects such as runway or roadway construction or equipment acquisition projects) Insert the Certificate of Compliance Based on Equipment and Materials Used on the Project.

# A4.3 SOLICITATION CLAUSE

# A4.3.1 Buy American Preference Statement

## **BUY AMERICAN PREFERENCE**

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

# A4.3.2 Certificate of Buy American Compliance – Total Facility

## CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark ( $\checkmark$ ) or the letter "X".

□ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States; or
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- □ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
  - a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
  - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
  - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
  - d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
  - e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

#### **Required Documentation**

**Type 3 Waiver** – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the "facility". The required documentation for a Type 3 waiver is:

a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

**Type 4 Waiver** – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

**False Statements**: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

# A4.3.3 Certificate of Buy American Compliance – Manufactured Product

## Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark ( $\checkmark$ ) or the letter "X".

□ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States;
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- 1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- 2. To faithfully comply with providing U.S. domestic product.
- 3. To furnish U.S. domestic product for any waiver request that the FAA rejects
- 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- □ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
  - 1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
  - 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
  - 3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
  - 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

#### **Required Documentation**

**Type 3 Waiver** – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the "item". The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

**Type 4 Waiver** – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

**False Statements**: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

## A5 CIVIL RIGHTS - GENERAL

# A5.1 SOURCE

#### 49 USC § 47123

## A5.2 APPLICABILITY

There are two separate civil rights provisions that apply to projects:

- 1. FAA General Civil Rights Provision and,
- 2. Title VI provisions, which are addressed in Appendix A6.

**Contract Types** – The General Civil Rights Provisions found in 49 USC § 47123, derived from the Airport and Airway Improvement Act of 1982, Section 520, apply to all sponsor contracts *regardless* of funding source.

**Use of Provision** – **MANDATORY TEXT**. There are two separate general civil rights provisions —one that is used for contracts, and one that is used for lease agreements or transfer agreements. The sponsor must incorporate the text of the appropriate provision without modification into the contract, or the lease or transfer agreement.

# A5.3 CONTRACT CLAUSE (Use the Correct Clause for the Situation)

## A5.3.1 Clause that is used for Contracts

#### GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

## A5.3.2 Clause that is used for Lease Agreements or Transfer Agreements

## GENERAL CIVIL RIGHTS PROVISIONS

The (tenant/concessionaire/lessee) agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. If the (tenant/concessionaire/lessee) transfers its obligation to another, the transferee is obligated in the same manner as the (tenant/concessionaire/lessor).

This provision obligates the (tenant/concessionaire/lessee) for the period during which the property is owned, used or possessed by the (tenant/concessionaire/lessee) and the airport remains obligated to the

Federal Aviation Administration. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

## A6 CIVIL RIGHTS – TITLE VI ASSURANCE

#### A6.1 SOURCE

49 USC § 47123

FAA Order 1400.11

## A6.2 APPLICABILITY

Title VI of the Civil Rights Act of 1964, as amended, (Title VI) prohibits discrimination on the grounds of race, color, or national origin under any program or activity receiving Federal financial assistance. Sponsors must include appropriate clauses from the Standard DOT Title VI Assurances in all contracts and solicitations.

The text of each individual clause comes from the U.S. Department of Transportation <u>Order DOT 1050.2</u>, Standard Title VI Assurances and Nondiscrimination Provisions, effective April 24, 2013. These assurances require that the Recipient (the sponsor) insert the appropriate clauses in the form provided by the DOT. Where the clause refers to the applicable activity, project, or program, it means the AIP project.

The clauses are as follows:

Contract Clause	The Sponsor must include the contract clause in:	Clause Text is Included in Paragraph
<ul> <li>Title VI Solicitation Notice –</li> <li>Assurance 2 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses</li> <li>Assurance 30d of the Airport Sponsor Assurances</li> </ul>	<ol> <li>All AIP funded solicitations for bids, requests for proposals, or any work subject to Title VI regulations; and</li> <li>All sponsor proposals for negotiated agreements regardless of funding source.</li> </ol>	A6.3.1
<ul> <li>Title VI Clauses for Compliance with Nondiscrimination Requirements</li> <li>Assurance 3 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses</li> <li>Assurance 30e.1 of the Airport Sponsor Assurances</li> </ul>	Every contract or agreement (unless the sponsor has determined, and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities) It has been determined that service contracts with utility companies that are not already subject to nondiscrimination requirements must include this clause.	A6.4.1

A6.2.1 Applicability of Title VI Solicitation Notice

Contract Clause	The Sponsor must include the contract clause in:	Clause Text is Included in Paragraph
<ul> <li>Title VI Required Clause for Property Interests Transferred from the United States</li> <li>Assurance 4 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses</li> <li>Assurance 30e.3 of the Airport Sponsor Assurances</li> </ul>	As a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor. This is a rare occurrence and it will be the responsibility of the United States government to include the clause in the contract.	A6.4.2
<ul> <li>Title VI Required Clause for Transfer of Real Property Acquired or Improved Under the Activity, Facility or Program –</li> <li>Assurance 5 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses</li> <li>Assurance 30e.4a of the Airport Sponsor Assurances</li> </ul>	As a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for all transfers of real property acquired or improved under Airport Improvement Program This applies to agreements such as leases where a physical portion of the airport is transferred for use, for example a fuel farm, apron space, or a parking facility.	A6.4.3
<ul> <li>Clause for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program</li> <li>Assurance 6 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses</li> <li>Assurance 30e.4b of the Airport Sponsor Assurances</li> </ul>	In any future (deeds, leases, licenses, permits, or similar instruments) entered into by the sponsor with other parties for the construction or use of, or access to, space on, over, or under real property acquired or improved under Airport Improvement Program This applies to agreements such as leases of concession space in a terminal.	A6.4.4
<ul> <li>Title VI List of Pertinent Nondiscrimination Acts and Authorities</li> <li>Assurance 3 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses</li> <li>Assurance 30e.2 of the Airport Sponsor Assurances</li> </ul>	Insert this list in every contract or agreement, unless the sponsor has determined, and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. <b>This list can be omitted if the FAA has</b> <b>determined that the contractor or company is already subject to</b> <b>nondiscrimination requirements.</b>	A6.4.5

## A6.3 SOLICITATION CLAUSE

#### The sponsor must include this clause in:

- 1) All AIP funded solicitations for bids, requests for proposals, or any work subject to Title VI regulations; and
- 2) All sponsor proposals for negotiated agreements regardless of funding source.

## A6.3.1 Title VI Solicitation Notice

#### **Title VI Solicitation Notice:**

The (**Name of Sponsor**), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, [select disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

## A6.4 CONTRACT CLAUSES

## A6.4.1 Title VI Clauses for Compliance with Nondiscrimination Requirements

The sponsor must include this contract clause in:

- 1) Every contract or agreement (unless the sponsor has determined, and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities); and
- 2) Service contracts with utility companies that are not already subject to nondiscrimination requirements.

#### **Compliance with Nondiscrimination Requirements:**

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

- 1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration another who fails or refuses to furnish the information, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or

- b. Cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the united States.

# A6.4.2 Title VI Clauses for Deeds Transferring United States Property

This is a rare occurrence, and it will be the responsibility of the United States government to include the clause in the contract. It will be included as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.

## CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of the Airport Improvement Program grant assurances.

**NOW, THEREFORE,** the Federal Aviation Administration as authorized by law and upon the condition that the SAVANNAH AIRPORT COMMISSION will accept title to the lands and maintain the project constructed thereon in accordance with CITY OF SAVANNAH, COUNTY OF CHATHAM, STATE OF GEORGIA, for the (**Airport Improvement Program or other program for which land is transferred**), and the policies and procedures prescribed by the Federal Aviation Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 USC § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the SAVANNAH AIRPORT COMMISSION all the right, title and interest of the U.S. Department of Transportation/Federal Aviation Administration in and to said lands described in (*Exhibit A attached hereto or other exhibit describing the transferred property*) and made a part hereof.

## (HABENDUM CLAUSE)

**TO HAVE AND TO HOLD** said lands and interests therein unto SAVANNAH AIRPORT COMMISSION and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the SAVANNAH AIRPORT COMMISSION, its successors and assigns.

THE SAVANNAH AIRPORT COMMISSION, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination

with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]\* (2) that the SAVANNAH AIRPORT COMMISSION will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the Federal Aviation Administration and its assigns as such interest existed prior to this instruction].\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

## A6.4.3 Title VI Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program

This applies to agreements such as leases where a physical portion of the airport is transferred for use—for example a fuel farm, apron space, or a parking facility—and will be included as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for all transfers of real property acquired or improved under the Airport Improvement Program.

#### CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE AIRPORT IMPROVEMENT PROGRAM

The following clauses will be included in (deeds, licenses, leases, permits, or similar instruments) entered into by the SAVANNAH AIRPORT COMMISSION pursuant to the provisions of the Airport Improvement Program grant assurances.

- A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
  - 1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a Federal Aviation Administration activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Nondiscrimination Acts and Regulations listed in the Pertinent List of Nondiscrimination Authorities (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, SAVANNAH AIRPORT COMMISSION will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.\*

C. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, THE SAVANNAH AIRPORT COMMISSION will have the right to enter or reenter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the SAVANNAH AIRPORT COMMISSION and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

## A6.4.4 Title VI Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program

This applies to agreements such as leases of concession space in a terminal and any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for the construction or use of, or access to, space on, over, or under real property acquired or improved under the Airport Improvement Program.

#### CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by SAVANNAH AIRPORT COMMISSION pursuant to the provisions of the Airport Improvement Program grant assurances.

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the List of discrimination Acts And Authorities.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above nondiscrimination covenants, SAVANNAH AIRPORT COMMISSION will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.\*
- C. With respect to deeds, in the event of breach of any of the above nondiscrimination covenants, SAVANNAH AIRPORT COMMISSION will there upon revert to and vest in and become the absolute property of SAVANNAH AIRPORT COMMISSION and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

# A6.4.5 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Insert this list in every contract or agreement, unless the sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. This list can be omitted if the FAA has determined that the contractor or company is already subject to nondiscrimination requirements.

#### Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

• Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

## A7 CLEAN AIR AND WATER POLLUTION CONTROL

#### A7.1 SOURCE

2 CFR § 200, Appendix II(G)

#### A7.2 APPLICABILITY

**Contract Types** – This provision is required for all contracts and lower tier contracts that exceed \$150,000.

**Use of Provision** – No mandatory language provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR §200.

#### A7.3 CONTRACT CLAUSE

#### CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

## A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

## A8.1 SOURCE

2 CFR § 200, Appendix II(E)

## A8.2 APPLICABILITY

Contract Workhours and Safety Standards Act Requirements (CWHSSA) requires contractors and subcontractors on covered contracts to pay laborers and mechanics employed in the performance of the contracts one and one-half times their basic rate of pay for all hours worked over 40 in a workweek. CWHSSA prohibits unsanitary, hazardous, or dangerous working conditions on federally assisted projects. The Wage and Hour Division (WHD) within the U.S. Department of Labor (DOL) enforces the compensation requirements of this Act, while DOL's Occupational Safety and Health Administration (OSHA) enforces the safety and health requirements

#### Contract Types -

*Construction* – This provision applies to all contracts and lower tier contracts that exceed \$100,000, and employ laborers, mechanics, watchmen, and guards.

*Equipment* – This provision applies to any equipment project exceeding \$100,000 that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. ARFF and SRE vehicles).

*Professional Services* – This provision applies to professional service agreements that exceed \$100,000 and employs laborers, mechanics, watchmen, and guards. This includes members of survey crews and exploratory drilling operations.

*Property* – While most land transactions do not involve employment of laborers, mechanics, watchmen, and guards, under certain circumstances, a property acquisition project could require such employment. Examples include the installation of property fencing or testing for environmental contamination

Use of Provision – MANDATORY TEXT. Sponsors must incorporate this text without modification.

## A8.3 CONTRACT CLAUSE

#### CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

#### 1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

#### 3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

#### 4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

#### A9 COPELAND "ANTI-KICKBACK" ACT

#### A9.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Parts 3 and 5

#### **A9.2 APPLICABILITY and PURPOSE**

The Copeland (Anti-Kickback) Act (18 USC 874 and 40 USC 3145) makes it unlawful to induce by force, intimidation, threat of dismissal from employment, or by any other manner, any person employed in the construction or repair of public buildings or public works, financed in whole or in part by the United States, to give up any part of the compensation to which that person is entitled under a contract of employment. The Copeland Act also requires each contractor and subcontractor to furnish weekly a statement of compliance with respect to the wages paid each employee during the preceding week.

#### **Contract Types** –

*Construction* – This provision applies to all construction contracts and subcontracts financed under the AIP that exceed \$2,000.

*Equipment* – This provision applies to all equipment installation projects (e.g. electrical vault improvements) financed under the AIP that exceed \$2,000. This provision does not apply to equipment acquisitions where the equipment is manufactured at the vendor's plant (e.g. SRE and ARFF vehicles).

*Professional Services* –The emergence of different project delivery methods has created situations where Professional Service Agreements (PSAs) include tasks that meet the definition of construction, alteration, or repair as defined in 29 CFR Part 5. If such tasks result in work that qualifies as construction, alteration, or repair and it exceeds \$2,000, the PSA must incorporate the Copeland Anti-kickback provision.

*Property* –Ordinarily, land acquisition projects would not involve employment of laborers or mechanics and thus the Copeland Anti-Kickback provision would not apply. However, land projects that involve installation of boundary fencing and demolition of structures would involve laborers and mechanics. The sponsor must include this provision if the land acquisition project involves employment of laborers or mechanics for a contract exceeding \$2,000.

**Use of Provision** – **MANDATORY TEXT.** 29 CFR Part 5 establishes specific language a sponsor must use in construction contracts. The sponsor may not make any modification to the standard language. Architectural/Engineering (A/E) firms that employ laborers and mechanics on a task that meets the definition of construction, alteration, or repair are acting as a contractor. The sponsor may not substitute the term "contractor" for "consultant" in such instances.

## A9.3 CONTRACT CLAUSE

#### COPELAND "ANTI-KICKBACK" ACT

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

## A10 DAVIS-BACON REQUIREMENTS

## A10.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Part 5

## A10.2 APPLICABILITY

The Davis-Bacon Act ensures that laborers and mechanics employed under the contract receive pay no less than the locally prevailing wages and fringe benefits as determined by the Department of Labor.

#### **Contract Types** –

*Construction* – Incorporate into all construction contracts and subcontracts that exceed \$2,000 and include funding from the AIP.

*Equipment* – This provision applies to all equipment installation projects (e.g. electrical vault improvements) financed under the AIP that exceed \$ 2, 000. This provision does not apply to equipment acquisitions where the equipment is manufactured at the vendor's plant (e.g. SRE and ARFF vehicles)

*Professional Services* – The emergence of different project delivery methods has created situations where Professional Service Agreements (PSAs) includes tasks that meet the definition of construction, alteration, or repair as defined in 29 CFR Part 5. If such tasks result in work that qualifies as construction, alteration, or repair and it exceeds \$2,000, the PSA must incorporate this clause.

*Property* – Ordinarily, land acquisition projects would not involve employment of laborers or mechanics and thus the provision would not apply. However, land projects that involve installation of boundary fencing and demolition of structures would involve laborers and mechanics. The sponsor must include this provision if the land acquisition project involves employment of laborers or mechanics for a contract exceeding \$2,000.

Fencing Projects – Fencing projects that exceed \$2,000 must include this provision.

**Use of Provision** – **MANDATORY TEXT.** 29 CFR part 5 establishes specific language a sponsor must use. The sponsor may not make any modification to the standard language. A/E firms that employ laborers and mechanics on a task that meets the definition of construction, alteration, or repair are acting as a contractor. The sponsor may not substitute the term "Contractor" for "Consultant" in such instances.

# A10.3 CONTRACT CLAUSE

#### **DAVIS-BACON REQUIREMENTS**

1. Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized

representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: *Provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or

the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.* the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at

*www.dol.gov/whd/forms/wh347instr.htm* or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5(a)(3)(i), and that such information is correct and complete;

(2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

# A11 DEBARMENT AND SUSPENSION

# A11.1 SOURCE

2 CFR part 180 (Subpart C)

2 CFR part 1200

DOT Order 4200.5

## A11.2 APPLICABILITY

The sponsor must verify that the firm or individual that it is entering into a contract with is not presently suspended, excluded, or debarred by any Federal department or agency from participating in federally assisted projects. The sponsor accomplishes this by:

- 1) Checking the System for Award Management (SAM.gov) to verify that the firm or individual is not listed in SAM.gov as being suspended, debarred, or excluded;
- 2) Collecting a certification from the firm or individual that it is not suspended, debarred, or excluded; and
- 3) Incorporating a clause in the contract that requires lower tier contracts to verify that no suspended, debarred, or excluded firm or individual is included in the project.

**Contract Types** – This requirement applies to *covered transactions*, which are defined in 2 CFR part 180. AIP funded contracts are non-procurement transactions, as defined by §180.970. Covered transactions include any AIP-funded contract, regardless of tier, that is awarded by a contractor, subcontractor, supplier, consultant, or its agent or representative in any transaction, if the amount of the contract is expected to equal or exceed \$25,000. This includes contracts associated with land acquisition projects.

**Use of Provision** – No mandatory language provided. The following language is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR part 180. For professional service agreements, sponsor may substitute bidder/offeror with consultant.

# A11.3 SOLICITATION CLAUSE

# A11.3.1 Bidder or Offeror Certification

#### CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

# A11.3.2 Lower Tier Contract Certification

#### CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

- 1. Checking the System for Award Management at website: http://www.sam.gov.
- 2. Collecting a certification statement similar to the Certification of Offerer /Bidder Regarding Debarment, above.
- 3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

# A12 DISADVANTAGED BUSINESS ENTERPRISE

# A12.1 SOURCE

49 CFR part 26

#### A12.2 APPLICABILITY

A sponsor that anticipates awarding \$250,000 or more in AIP funded prime contracts in a federal fiscal year must have an approved Disadvantaged Business Enterprise (DBE) program on file with the FAA Office of Civil Rights (§ 26.21). The approved DBE program will identify a 3-year overall program goal that the sponsor bases on the availability of ready, willing, and able DBEs relative to all businesses ready, willing, and able to participate on the project (§ 26.45).

**Contract Types** – Sponsors with a DBE program on file with the FAA must include the three following provisions, if applicable:

- 1) Clause in all solicitations for proposals for which a contract goal has been established,
- 2) Clause in each prime contract, and
- 3) Clause in solicitations that are obtaining DBE participation through race/gender neutral means.

#### Use of Provision -

- Solicitations with a DBE Project Goal No mandatory language provided. 49 CFR §26.53
  requires a sponsor's solicitation to address what a contractor must submit on proposed DBE
  participation. The language of A12.3.1 is acceptable to the FAA in meeting the intent of this
  requirement. If the sponsor uses different language, the sponsor's revised language must
  fully satisfy these requirements. The sponsor may require the contractor's submittal on
  proposed DBE participation either at bid opening as a matter of responsiveness or within five
  days of bid opening as a matter of responsibility.
- 2. *Solicitations Relying on Race-gender Neutral Means* No mandatory language provided. The language of A12.3.2 is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy requirements for a sponsor that is not applying a project specific contract goal but is covered by a DBE program on file with the FAA.
- Contracts Covered by DBE Program MANDATORY TEXT PROVIDED. Sponsors must incorporate this language if they have a DBE program on file with the FAA. This includes projects where DBE participation is obtained through race-gender neutral means (i.e. no project goal). Sections §26.13 and §26.29 establish mandatory language for contractor assurance and prompt payment. The sponsor must not modify the language.
- 4. Sponsors that are not required to have a DBE program on file with the FAA are not required to include DBE provisions and clauses.

# A12.3 **REQUIRED PROVISIONS**

# A12.3.1 Solicitation Language (Solicitations that include a Project Goal)

Information Submitted as a matter of bidder responsiveness:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

#### Information submitted as a matter of bidder responsibility:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in its commitment within five days after bid opening.

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

# A12.3.2 Solicitation Language (Race/Gender Neutral Means)

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the SAVANNAH AIRPORT COMMISSION to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

# A12.3.3 Prime Contracts (Projects Covered by a DBE Program)

#### DISADVANTAGED BUSINESS ENTERPRISES

#### Contract Assurance (§ 26.13) -

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Owner deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

**Prompt Payment (§26.29)** – The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than [specify number] days from the receipt of each payment the prime contractor receives from SAVANNAH AIRPORT COMMISSION The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the SAVANNAH AIRPORT COMMISSION. This clause applies to both DBE and non-DBE subcontractors.

## A13 DISTRACTED DRIVING

#### A13.1 SOURCE

Executive Order 13513

DOT Order 3902.10

#### A13.2 APPLICABILITY

The FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

**Contract Types** – Sponsors must insert this provision in all AIP funded contracts that exceed the micropurchase threshold of 2 CFR §200.67 (currently set at \$3,500).

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy these requirements.

#### A13.3 CONTRACT CLAUSE

#### **TEXTING WHEN DRIVING**

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

## A14 ENERGY CONSERVATION REQUIREMENTS

## A14.1 SOURCE

2 CFR § 200, Appendix II(H)

## A14.2 APPLICABILITY

The Energy Conservation Requirements of 2 CFR § 200 Appendix II(H) requires this provision on energy efficiency.

**Contract Types** – The sponsor must include this provision in all AIP funded contracts and lower-tier contracts.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy these requirements. Sponsor may substitute "Contractor and subcontractor" with "Consultant and sub-consultant" for professional service agreements.

## A14.3 CONTRACT CLAUSE

#### ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201*et seq*).

# A15 DRUG FREE WORKPLACE REQUIREMENTS

## A15.1 SOURCE

49 CFR part 32

Drug-Free Workplace Act of 1988 (41 U.S.C. 701 et seq., as amended)

#### A15.2 APPLICABILITY

The Drug-Free Workplace Act of 1988 requires some Federal contractors and *all* Federal grantees to agree that they will provide drug-free workplaces as a condition of receiving a contract or grant from a Federal agency. The Act does *not* apply to contractors, subcontractors, or subgrantees, although the Federal grantees workplace may be where the contractors, subcontractors, or subgrantees are working.

**Contract Types** – This provision applies to all AIP funded projects, but not to the contracts between the grantee (the sponsor) and a contractor, subcontractors, suppliers, or subgrantees.

**Use of Provision** – No mandatory or recommended text provided because the requirements do not extend beyond the sponsor level.

## A15.3 CONTRACT CLAUSE

None.

# A16 EQUAL EMPLOYEMENT OPPORTUNITY (EEO)

# A16.1 SOURCE

2 CFR 200, Appendix II(C)

41 CFR § 60-1.4

41 CFR § 60-4.3

Executive Order 11246

# A16.2 APPLICABILITY

The purpose of this provision is to provide equal opportunity for all persons, without regard to race, color, religion, sex, or national origin who are employed or seeking employment with contractors performing under a federally assisted construction contract. There are two provisions — a construction clause and a specification clause.

The equal opportunity contract clause must be included in any contract or subcontract when the amount exceeds \$10,000. Once the equal opportunity clause is determined to be applicable, the contract or subcontract must include the clause for the remainder of the year, regardless of the amount or the contract.

#### Contract Types -

*Construction* – The sponsor must incorporate contract and specification language in all construction contracts and subcontracts as required above.

*Equipment* – The sponsor must incorporate contract and specification language into all equipment contracts as required above that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. ARFF and SRE vehicles).

*Professional Services* – The sponsor must include contract and specification language into all professional service agreements as required above.

*Property* – The sponsor must include contract and specification language into all land acquisition projects that include work that qualifies as construction work as defined by 41 CFR part 60 as required above. An example is installation of boundary fencing.

**Use of Provision** – **MANDATORY TEXT.** 41 CFR § 60-1.4 provides the mandatory *contract* language. 41 CFR § 60-4.3 provides the mandatory *specification* language. The sponsor must incorporate these clauses without modification.

# A16.3 MANDATORY CONTRACT CLAUSE

## A16.3.1 EEO Contract Clause

#### EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

# A16.3.2 EEO Specification

#### STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:

(1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);

(3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in

which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.

1. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and

employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the

implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

# A17 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

# A17.1 SOURCE

29 USC § 201, et seq

# A17.2 APPLICABILITY

The U.S. Department of Labor (DOL) Wage and Hour Division administers the Fair Labor Standards Act (FLSA). This act prescribes federal standards for basic minimum wage, overtime pay, record keeping, and child labor standards.

**Contract Types** – Per the Department of Labor, all employees of certain enterprises having workers engaged in interstate commerce; producing goods for interstate commerce; or handling, selling, or otherwise working on goods or materials that have been moved in or produced for such commerce by any person are covered by the FLSA.

All consultants, sub-consultants, contractors, and subcontractors employed under this federally assisted project must comply with the FLSA.

*Professional Services* – 29 CFR § 213 exempts employees in a bona fide executive, administrative or professional capacity. Because professional firms employ individuals that are not covered by this exemption, the sponsor's agreement with a professional services firm must include the FLSA provision.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 29 USC § 201. The sponsor must select *contractor* or *consultant*, as appropriate for the contract.

# A17.3 SOLICITATION CLAUSE

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The *Contractor* has full responsibility to monitor compliance to the referenced statute or regulation. The *Contractor* must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

# A18 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

## A18.1 SOURCE

31 USC § 1352 – Byrd Anti-Lobbying Amendment

2 CFR part 200, Appendix II(J)

49 CFR part 20, Appendix A

## A18.2 APPLICABILITY

Consultants and contractors that apply or bid for an award of \$100,000 or more must certify that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress in connection with obtaining any Federal contract, grant, or another award covered by 31 USC 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award.

Contract Types – The sponsor must incorporate this provision into all contracts exceeding \$100,000.

**Use of Provision** – **MANDATORY TEXT.** Appendix A to 49 CFR Part 20 prescribes language the sponsor must use. The sponsor must incorporate this provision without modification.

## A18.3 CONTRACT CLAUSE

#### **CERTIFICATION REGARDING LOBBYING**

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

# A19 PROHIBITION of SEGREGATED FACILITIES

# A19.1 SOURCE

41 CFR § 60

# A19.2 APPLICABILITY

The contractor must comply with the requirements of the EEO clause by ensuring that facilities they provide for employees are free of segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin. This clause must be included in all contracts that include the equal opportunity clause, regardless of the amount of the contract.

**Contract Types** – AIP sponsors must incorporate the Prohibition of Segregated Facilities clause in any contract containing the Equal Employment Opportunity clause of 41 CFR §60.1. This obligation flows down to subcontract and sub-tier purchase orders containing the Equal Employment Opportunity clause.

*Construction* – Construction work means construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.

Equipment – On site installation of equipment such as airfield lighting control equipment meets the definition of construction and thus this provision would apply. This provision does not apply to equipment projects involving manufacture of the item at a vendor's manufacturing plant. An example would be the manufacture of a SRE or ARFF vehicle.

*Professional Services* – Professional services that include tasks that qualify as construction work as defined by 41 CFR part 60. Examples include the installation of noise monitoring equipment.

*Property/Land* – Land acquisition contracts that include tasks that qualify as construction work as defined by 41 CFR part 60. Examples include demolition of structures or installation of boundary fencing.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 41 CFR  $\S$  60.

# A19.3 CONTRACT CLAUSE

## **PROHIBITION OF SEGREGATED FACILITIES**

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.

(b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing

facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

## A20 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

## A20.1 SOURCE

29 CFR part 1910

#### A20.2 APPLICABILITY

**Contract Types** – All contracts and subcontracts must comply with the Occupational Safety and Health Act of 1970 (OSH). The U.S. Department of Labor Occupational Safety and Health Administration (OSHA) oversees the workplace health and safety standards wage provisions from OSH.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 20 CFR part 1910.

#### A20.3 CONTRACT CLAUSE

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

# A21 PROCUREMENT OF RECOVERED MATERIALS

# A21.1 SOURCE

2 CFR § 200.322

40 CFR part 247

Solid Waste Disposal Act

# A21.2 APPLICABILITY

Sponsors of AIP funded development and equipment projects must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. Section 6002 emphasizes maximizing energy and resource recovery through use of affirmative procurement actions for recovered materials identified in the Environmental Protection Agency (EPA) guidelines codified at 40 CFR part 247. When acquiring items designated in the guidelines, the sponsor must procure items that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.

**Contract Types** – This provision applies to any contracts that include procurement of products designated in subpart B of 40 CFR part 247 where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000.

Construction and Equipment – Include this provision in all construction and equipment projects.

*Professional Services and Property* – Include this provision if the agreement includes procurement of a product that exceeds \$10,000.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR § 200.

## A21.3 CONTRACT CLAUSE

#### PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or
- 2) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

#### A22 RIGHT TO INVENTIONS

#### A22.1 SOURCE

2 CFR § 200, Appendix II(F)

37 CFR §401

# A22.2 APPLICABILITY

**Contract Types** – This provision applies to all contracts and subcontracts with small business firms or nonprofit organizations that include performance of *experimental, developmental, or research work*. This clause is not applicable to construction, equipment, or professional service contracts unless the contract includes *experimental, developmental, or research work*.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

#### A22.3 CONTRACT CLAUSE

#### **RIGHTS TO INVENTIONS**

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

## A23 SEISMIC SAFETY

## A23.1 SOURCE

49 CFR part 41

#### A23.2 APPLICABILITY

**Contract Types** – This provision applies to construction of new buildings and additions to existing buildings financed in whole or in part through the Airport Improvement Program.

*Professional Services*– Sponsor must incorporate this clause in any contract involved in the construction of new buildings or structural addition to existing buildings.

*Construction* – Sponsor must incorporate this clause in any contract involved in the construction of new buildings or structural addition to existing buildings.

*Equipment* – Sponsor must include the construction provision if the project involves construction or structural addition to a building such as an electrical vault project to accommodate or install equipment.

Land - This provision will not typically apply to a property/land project.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 CFR part 41.

# A23.3 CONTRACT CLAUSE

#### A23.3.1 Professional Service Agreements for Design

#### SEISMIC SAFETY

In the performance of design services, the Consultant agrees to furnish a building design and associated construction specification that conform to a building code standard that provides a level of seismic safety substantially equivalent to standards as established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their building code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety. At the conclusion of the design services, the Consultant agrees to furnish the Owner a "certification of compliance" that attests conformance of the building design and the construction specifications with the seismic standards of NEHRP or an equivalent building code.

#### A23.3.2 Construction Contracts

#### SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

# A24 TAX DELINQUENCY AND FELONY CONVICTIONS

# A24.1 SOURCE

Sections 415 and 416 of Title IV, Division L of the Consolidated Appropriations Act, 2014 (Pub. L. 113-76), and similar provisions in subsequent appropriations acts.

DOT Order 4200.6 - Requirements for Procurement and Non-Procurement Regarding Tax Delinquency and Felony Convictions

# A24.2 APPLICABILITY

The sponsor must ensure that no funding goes to any contractor who:

- Has been convicted of a Federal felony within the last 24 months; or
- Has any outstanding tax liability for which all judicial and administrative remedies have lapsed or been exhausted.

Contract Types – This provision applies to all contracts funded in whole or part with AIP.

**Use of Provision** – The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of DOT Order 4200.6.

# A24.3 CONTRACT CLAUSE

## CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark ( $\checkmark$ ) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

#### Certifications

- The applicant represents that it is (✓) is not (✓) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is ( ✓ ) is not ( ✓ ) is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

#### Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify

the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

#### **Term Definitions**

**Felony conviction:** Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

**Tax Delinquency**: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

# A25 TERMINATION OF CONTRACT

## A25.1 SOURCE

2 CFR § 200 Appendix II(B)

FAA Advisory Circular 150/5370-10, Section 80-09

# A25.2 APPLICABILITY

**Contract Types** – All contracts and subcontracts in excess of \$10,000 must address *termination for cause* and *termination for convenience* by the sponsor. The provision must address the manner (i.e. notice, opportunity to cure, and effective date) by which the sponsor's contract will be affected and the basis for settlement (i.e. incurred expenses, completed work, profit, etc.).

#### Use of Provision -

*Termination for Default* – **MANDATORY TEXT.** Section 80-09 of FAA Advisory Circular 150/5370-10 establishes standard language for Termination for Default under a construction contract. The sponsor must not make any changes to this standard language.

*Termination for Convenience* – No mandatory text provided. The sponsor must include a clause for termination for convenience. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

*Equipment, Professional Services, and Property* – No mandatory text provided. The sponsor may use their established clause language provided that it adequately addresses the intent of Appendix II(B) to Part 200, which addresses termination for fault and for convenience.

## A25.3 CONTRACT CLAUSE

## A25.3.1 Termination for Convenience

#### TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

- 1. Contractor must immediately discontinue work as specified in the written notice.
- 2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
- 3. Discontinue orders for materials and services except as directed by the written notice.
- 4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
- 5. Complete performance of the work not terminated by the notice.

6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- 1) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
- documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- 3) reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
- 4) reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

#### TERMINATION FOR CONVENIENCE (PROFESSIONAL SERVICES)

The Owner may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of Consultant. Upon receipt of the notice of termination, except as explicitly directed by the Owner, the Contractor must immediately discontinue all services affected.

Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

# A25.3.2 Termination for Default

#### TERMINATION FOR DEFAULT (CONSTRUCTION)

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights, and remedies associated with Owner termination of this contract due to default of the Contractor.

#### **TERMINATION FOR DEFAULT (EQUIPMENT)**

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract if the Contractor:

1. Fails to commence the Work under the Contract within the time specified in the Notice- to-Proceed;

- 2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms;
- 3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
- 4. Fails to comply with material provisions of the Contract;
- 5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements; or
- 6. Becomes insolvent or declares bankruptcy.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within [10] days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

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

## TERMINATION FOR DEFAULT (PROFESSIONAL SERVICES)

Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.

The terminating party must provide the breaching party [7] days advance written notice of its intent to terminate the Agreement. The notice must specify the nature and extent of the breach, the conditions necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

- a) **Termination by Owner**: The Owner may terminate this Agreement in whole or in part, for the failure of the Consultant to:
  - 1. Perform the services within the time specified in this contract or by Owner approved extension;
  - 2. Make adequate progress so as to endanger satisfactory performance of the Project; or
  - 3. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

If, after finalization of the termination action, the Owner determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the Owner issued the termination for the convenience of the Owner.

- b) **Termination by Consultant**: The Consultant may terminate this Agreement in whole or in part, if the Owner:
  - 1. Defaults on its obligations under this Agreement;
  - 2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
  - 3. Suspends the Project for more than [180] days due to reasons beyond the control of the Consultant.

Upon receipt of a notice of termination from the Consultant, Owner agrees to cooperate with Consultant for the purpose of terminating the agreement or portion thereof, by mutual consent. If Owner and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the Owner's breach of the contract.

In the event of termination due to Owner breach, the Engineer is entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. Owner agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

# A26 TRADE RESTRICTION CERTIFICATION

## A26.1 SOURCE

49 USC § 50104

49 CFR part 30

# A26.2 APPLICABILITY

Unless waived by the Secretary of Transportation, sponsors may not use AIP funds on a product or service from a foreign country included in the current list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR).

Contract Types – The trade restriction certification and clause applies to all AIP funded projects.

**Use of Provision** – **MANDATORY TEXT.** 49 CFR part 30 prescribes the language for this model clause. The sponsor must include this certification language in all contracts and subcontracts without modification.

# A26.3 SOLICITATION CLAUSE

#### TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror -

- is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

#### A27 VETERAN'S PREFERENCE

#### A27.1 SOURCE

49 USC § 47112(c)

#### A27.2 APPLICABILITY

**Contract Types** – This provision applies to all AIP funded projects that involve labor to carry out the project. This preference, which excludes executive, administrative, and supervisory positions, applies to covered veterans (as defined under § 47112(c)) only when they are readily available and qualified to accomplish the work required by the project.

**Use of Provision** – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 USC § 47112.

#### A27.3 CONTRACT CLAUSE

#### **VETERAN'S PREFERENCE**

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

# GENERAL CONSTRUCTION ITEMS

### SAVANNAH AIRPORT COMMISSION

Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS AC 150/5370-10H

#### SECTION C-100 CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)

**100-1 General.** Quality is more than test results. Quality is the combination of proper materials, testing, workmanship, equipment, inspection, and documentation of the project. Establishing and maintaining a culture of quality is key to achieving a quality project. The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established, and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The Contractor shall establish a CQCP that will:

- **a.** Provide qualified personnel to develop and implement the CQCP.
- **b.** Provide for the production of acceptable quality materials.
- c. Provide sufficient information to assure that the specification requirements can be met.
- d. Document the CQCP process.

The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the CQCP has been reviewed and approved by the Resident Project Representative (RPR). No partial payment will be made for materials subject to specific quality control (QC) requirements until the CQCP has been reviewed and approved.

The QC requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the quality assurance (QA) testing requirements. QA testing requirements are the responsibility of the RPR or Contractor as specified in the specifications.

A Quality Control (QC)/Quality Assurance (QA) workshop with the Engineer, Resident Project Representative (RPR), Contractor, subcontractors, testing laboratories, and Owner's representative must be held prior to start of construction. The QC/QA workshop will be facilitated by the Contractor. The Contractor shall coordinate with the Airport and the RPR on time and location of the QC/QA workshop. Items to be addressed, at a minimum, will include:

**a.** Review of the CQCP including submittals, QC Testing, Action & Suspension Limits for Production, Corrective Action Plans, Distribution of QC reports, and Control Charts.

**b.** Discussion of the QA program.

**c.** Discussion of the QC and QA Organization and authority including coordination and information exchange between QC and QA.

**d.** Establish regular meetings to discuss control of materials, methods and testing.

e. Establishment of the overall QC culture.

#### **100-2 Description of program.**

**a.** General description. The Contractor shall establish a CQCP to perform QC inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. The CQCP shall ensure conformance to applicable specifications and plans with respect to materials, off-site fabrication, workmanship, construction, finish, and functional performance. The CQCP shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of QC.

**b.** Contractor Quality Control Program (CQCP). The Contractor shall describe the CQCP in a written document that shall be reviewed and approved by the RPR prior to the start of any production, construction, or off-site fabrication. The written CQCP shall be submitted to the RPR for review and approval at least 10 calendar days before the CQCP Workshop. The Contractor's CQCP and QC testing laboratory must be approved in writing by the RPR prior to the Notice to Proceed (NTP).

The CQCP shall be organized to address, as a minimum, the following:

- 1. QC organization and resumes of key staff
- 2. Project progress schedule
- 3. Submittals schedule
- 4. Inspection requirements
- 5. QC testing plan
- 6. Documentation of QC activities and distribution of QC reports
- 7. Requirements for corrective action when QC and/or QA acceptance criteria are not met
- 8. Material quality and construction means and methods. Address all elements applicable to the project that affect the quality of the pavement structure including subgrade, subbase, base, and surface course. Some elements that must be addressed include, but is not limited to mix design, aggregate grading, stockpile management, mixing and transporting, placing and finishing, quality control testing and inspection, smoothness, laydown plan, equipment, and temperature management plan.

The Contractor must add any additional elements to the CQCP that is necessary to adequately control all production and/or construction processes required by this contract.

**100-3 CQCP organization.** The CQCP shall be implemented by the establishment of a QC organization. An organizational chart shall be developed to show all QC personnel, their authority, and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all QC staff by name and function and shall indicate the total staff required to implement all elements of the CQCP, including inspection and testing for each item of work. If necessary, different technicians can be used for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the CQCP, the personnel assigned shall be subject to the qualification requirements of paragraphs 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The QC organization shall, as a minimum, consist of the following personnel:

**a. Program Administrator.** The Contractor Quality Control Program Administrator (CQCPA) must be a fulltime employee of the Contractor, or a consultant engaged by the Contractor. The CQCPA must have a minimum of five (5) years of experience in QC pavement construction with prior QC experience on a project of comparable size and scope as the contract.

Included in the five (5) years of paving/QC experience, the CQCPA must meet at least one of the following requirements:

(1) Professional Engineer with one (1) year of airport paving experience.

(2) Engineer-in-training with two (2) years of airport paving experience.

(3) National Institute for Certification in Engineering Technologies (NICET) Civil Engineering Technology Level IV with three (3) years of airport paving experience.

(4) An individual with four (4) years of airport paving experience, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.

The CQCPA must have full authority to institute any and all actions necessary for the successful implementation of the CQCP to ensure compliance with the contract plans and technical specifications. The CQCPA authority must include the ability to immediately stop production until materials and/or processes are in compliance with contract specifications. The CQCPA must report directly to a principal officer of the construction firm. The CQCPA may supervise the Quality Control Program on more than one project provided that person can be at the job site within two (2) hours after being notified of a problem.

**b. QC technicians.** A sufficient number of QC technicians necessary to adequately implement the CQCP must be provided. These personnel must be either Engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II in Civil Engineering Technology or higher and shall have a minimum of two (2) years of experience in their area of expertise.

The QC technicians must report directly to the CQCPA and shall perform the following functions:

(1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by paragraph 100-6.

(2) Performance of all QC tests as required by the technical specifications and paragraph100-8.

(3) Performance of tests for the RPR when required by the technical specifications.

Certification at an equivalent level of qualification and experience by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

**c. Staffing levels.** The Contractor shall provide sufficient qualified QC personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The CQCP shall state where different technicians will be required for different work elements.

**100-4 Project progress schedule.** Critical QC activities must be shown on the project schedule as required by Section 80, paragraph 80-03, *Execution and Progress*.

**100-5** Submittals schedule. The Contractor shall submit a detailed listing of all submittals (for example, mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include as a minimum:

- **a.** Specification item number
- **b.** Item description
- **c.** Description of submittal
- d. Specification paragraph requiring submittal
- e. Scheduled date of submittal

**100-6 Inspection requirements.** QC inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by paragraph 100-9.

Inspections shall be performed as needed to ensure continuing compliance with contract requirements until completion of the particular feature of work. Inspections shall include the following minimum requirements:

**a.** During plant operation for material production, QC test results and periodic inspections shall be used to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment used in proportioning and mixing shall be inspected to ensure its proper operating condition. The CQCP shall detail how these and other QC functions will be accomplished and used.

**b.** During field operations, QC test results and periodic inspections shall be used to ensure the quality of all materials and workmanship. All equipment used in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The CQCP shall document how these and other QC functions will be accomplished and used.

#### 100-7 Contractor QC testing facility.

**a.** For projects that include Item P-401, Item P-403, and Item P-404, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM D3666, *Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials*:

- 8.1.3 Equipment Calibration and Checks;
- 8.1.9 Equipment Calibration, Standardization, and Check Records;
- 8.1.12 Test Methods and Procedures

**b.** For projects that include P-501, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM C1077, Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation:

- 7 Test Methods and Procedures
- 8 Facilities, Equipment, and Supplemental Procedures

**100-8 QC testing plan.** As a part of the overall CQCP, the Contractor shall implement a QC testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional QC tests that the Contractor deems necessary to adequately control production and/or construction processes.

The QC testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- **a.** Specification item number (e.g., P-401)
- b. Item description (e.g., Hot Mix Asphalt Pavements)
- c. Test type (e.g., gradation, grade, asphalt content)

**d.** Test standard (e.g., ASTM or American Association of State Highway and Transportation Officials (AASHTO) test number, as applicable)

**e.** Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated)

f. Responsibility (e.g., plant technician)

g. Control requirements (e.g., target, permissible deviations)

The QC testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D3665. The RPR shall be provided the opportunity to witness QC sampling and testing.

All QC test results shall be documented by the Contractor as required by paragraph 100-9.

**100-9 Documentation.** The Contractor shall maintain current QC records of all inspections and tests performed. These records shall include factual evidence that the required QC inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the RPR daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the CQCPA.

Contractor QC records required for the contract shall include, but are not necessarily limited to, the following records:

**a. Daily inspection reports.** Each Contractor QC technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These technician's daily reports shall provide factual evidence that continuous QC inspections have been performed and shall, as a minimum, include the following:

- (1) Technical specification item number and description
- (2) Compliance with approved submittals
- (3) Proper storage of materials and equipment
- (4) Proper operation of all equipment
- (5) Adherence to plans and technical specifications
- (6) Summary of any necessary corrective actions
- (7) Safety inspection.
- (8) Photographs and/or video

The daily inspection reports shall identify all QC inspections and QC tests conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible QC technician and the CQCPA. The RPR shall be provided at least one copy of each daily inspection report on the work day following the day of record. When QC inspection and test results are recorded and transmitted electronically, the results must be archived.

**b.** Daily test reports. The Contractor shall be responsible for establishing a system that will record all QC test results. Daily test reports shall document the following information:

- (1) Technical specification item number and description
- (2) Test designation
- (3) Location
- (4) Date of test
- (5) Control requirements
- (6) Test results
- (7) Causes for rejection
- (8) Recommended remedial actions
- (9) Retests

Test results from each day's work period shall be submitted to the RPR prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical QC charts. When QC daily test results are recorded and transmitted electronically, the results must be archived.

**100-10** Corrective action requirements. The CQCP shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the CQCP as a whole, and for individual items of work contained in the technical specifications.

The CQCP shall detail how the results of QC inspections and tests will be used for determining the need for corrective action and shall contain clear rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical QC charts for individual QC tests. The requirements for corrective action shall be linked to the control charts.

**100-11 Inspection and/or observations by the RPR.** All items of material and equipment are subject to inspection and/or observation by the RPR at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate QC system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to inspection and/or observation by the RPR at the site for the same purpose.

Inspection and/or observations by the RPR does not relieve the Contractor of performing QC inspections of either on-site or off-site Contractor's or subcontractor's work.

#### 100-12 Noncompliance.

**a.** The Resident Project Representative (RPR) will provide written notice to the Contractor of any noncompliance with their CQCP. After receipt of such notice, the Contractor must take corrective action.

**b.** When QC activities do not comply with either the CQCP or the contract provisions or when the Contractor fails to properly operate and maintain an effective CQCP, and no effective corrective actions have been taken after notification of non-compliance, the RPR will recommend the Owner take the following actions:

- (1) Order the Contractor to replace ineffective or unqualified QC personnel or subcontractors and/or
- (2) Order the Contractor to stop operations until appropriate corrective actions are taken.

#### METHOD OF MEASUREMENT

**100-13 Basis of measurement and payment.** Contractor Quality Control Program (CQCP) is for the personnel, tests, facilities and documentation required to implement the CQCP. The CQCP *is an incidental cost to the project*.

#### **BASIS OF PAYMENT**

#### 100-14 NOT USED.

#### REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

National Institute for Certification in Engineering Technologies (NICET)

ASTM International (ASTM)

ASTM C1077	Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D3666	Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials

#### **END OF SECTION C-100**

#### SECTION C-102 TEMPORARY AIR & WATER POLLUTION, SOIL EROSION & SILTATION CONTROL

#### I. DESCRIPTION

- 1. This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.
- 2. Temporary erosion control shall be in accordance with the approved erosion control plan; the approved Construction Safety and Phasing Plan (CSPP) and AC 150/5370-2, *Operational Safety on Airports During Construction*. The temporary erosion control measures contained herein shall be coordinated with the permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.
- **3.** Temporary control may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites.
- **4.** Temporary control measures shall be designed, installed and maintained to minimize the creation of wildlife attractants that have the potential to attract hazardous wildlife on or near public-use airports.

#### **II. MATERIALS**

- 1. **Grass.** Grass that will not compete with the grasses sown later for permanent cover per Item T-901shall be a quick-growing species (such as ryegrass, Italian ryegrass, or cereal grasses) suitable to the area providing a temporary cover. Selected grass species shall not create a wildlife attractant.
- 2. Mulches. Mulches may be hay, straw, fiber mats, netting, bark, wood chips, or other suitable material reasonably clean and free of noxious weeds and deleterious materials per Item T-908. Mulches shall not create a wildlife attractant.
- **3. Fertilizer.** Fertilizer shall be a standard commercial grade and shall conform to all federal and state regulations and to the standards of the Association of Official Agricultural Chemists.
- 4. Slope drains. Slope drains may be constructed of pipe, fiber mats, rubble, concrete, asphalt, or other materials that will adequately control erosion.
- **5. Silt fence.** Silt fence shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life. Silt fence shall meet the requirements of ASTM D6461.
- 6. Other. All other materials shall meet commercial grade standards and shall be approved by the RPR before being incorporated into the project.

#### **III. CONSTRUCTION REQUIREMENTS**

1. General. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

The RPR shall be responsible for assuring compliance to the extent that construction practices, construction operations, and construction work are involved.

- 2. Schedule. Prior to the start of construction, the Contractor shall submit schedules in accordance with the approved Construction Safety and Phasing Plan (CSPP) and the plans for accomplishment of temporary and permanent erosion control work for clearing and grubbing; grading; construction; paving; and structures at watercourses. The Contractor shall also submit a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials. Work shall not be started until the erosion control schedules and methods of operation for the applicable construction have been accepted by the RPR.
- **3.** Construction details. The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the plans and approved CSPP. Except where future construction operations will damage slopes, the Contractor shall perform the permanent seeding and mulching, and other specified slope protection work in stages, as soon as substantial areas of exposed slopes can be made available. Temporary erosion and pollution control measures will be used to correct conditions that develop during construction that were not foreseen during the design stage; that are needed prior to installation of permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices but are not associated with permanent control features on the project.

Where erosion may be a problem, schedule and perform clearing and grubbing operations so that grading operations and permanent erosion control features can follow immediately if project conditions permit. Temporary erosion control measures are required if permanent measures cannot immediately follow grading operations. The RPR shall limit the area of clearing and grubbing, excavation, borrow, and embankment operations in progress, commensurate with the Contractor's capability and progress in keeping the finish grading, mulching, seeding, and other such permanent control measures current with the accepted schedule. If seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken immediately to the extent feasible and justified as directed by the RPR.

The Contractor shall provide immediate permanent or temporary pollution control measures to minimize contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment as directed by the RPR. If temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or directed by the RPR, the work shall be performed by the Contractor and the cost shall be incidental to this item.

The RPR may increase or decrease the area of erodible earth material that can be exposed at any time based on an analysis of project conditions.

The erosion control features installed by the Contractor shall be maintained by the Contractor during the construction period.

Provide temporary structures whenever construction equipment must cross watercourses at frequent intervals. Pollutants such as fuels, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into any waterways, impoundments or into natural or manmade channels.

**4. Installation, maintenance and removal of silt fence.** Silt fences shall extend a minimum of 16 inches (41 cm) and a maximum of 34 inches (86 cm) above the ground surface. Posts shall be set no more than 10 feet (3 m) on center. Filter fabric shall be cut from a continuous roll to the length required minimizing joints where possible. When joints are necessary, the fabric shall be spliced at a support post with a minimum 12-inch (300-mm) overlap and securely sealed. A trench shall be excavated approximately 4 inches (100 mm) deep by 4 inches (100 mm) wide on the upslope side of the silt fence. The trench shall be backfilled, and the soil compacted over the silt fence fabric. The Contractor shall remove and dispose of silt that accumulates during construction and prior to establishment of permanent erosion control. The fence shall be maintained in good working condition until permanent erosion control is established. Silt fence shall be removed upon approval of the RPR.

#### **IV. METHOD OF MEASUREMENT**

- 1. Temporary erosion and pollution control work required will be performed as scheduled or directed by the RPR. Completed and accepted work will be measured as follows:
  - a. Temporary seeding and mulching will be measured by the square yard (square meter).
  - **b.** Temporary slope drains will be measured by the linear foot (meter).
  - c. Installation and removal of silt fence will be measured by the linear foot.
  - d. Construction exits will be measured per each.
- 2. Control work performed for protection of construction areas outside the construction limits, such as borrow and waste areas, haul roads, equipment and material storage sites, and temporary plant sites, will not be measured and paid for directly but shall be considered as a subsidiary obligation of the Contractor.

#### V. BASIS OF PAYMENT

1. Accepted quantities of temporary water pollution, soil erosion, and siltation control work ordered by the RPR and measured as provided in paragraph 102-4.1 will be paid for under:

Item P-102-5.1	Sediment Barrier – Non-Sensitive Areas (Sd1-NS) – per linear foot
Item P-102-5.2	Sediment Barrier – Sensitive Areas (Sd1-S) – per linear foot
Item P-102-5.3	Inlet Sediment Trap – Filter Fabric with Supporting Frame (Sd2-F) – per each
Item P-102-5.4	Rock Filter Dam (Rd) – per linear foot
Item P-102-5.5	Construction Exit (Co) – per each
Item P-102-5.6	Disturbed Area Stabilization with Mulching Only (Ds1) - per square yard
Item P-102-5.7	Dust Control on Disturbed Areas (Du) – per square yard
Item P-102-5.8	Storm Drain Outlet Protection (St) – per ton
Item P-102-5.9	Floating Surface Skimmer (Sk) – per each

Where other directed work falls within the specifications for a work item that has a contract price, the units of work shall be measured and paid for at the contract unit price bid for the various items.

Temporary control features not covered by contract items that are ordered by the RPR will be paid for in accordance with Section 90, paragraph 90-05 *Payment for Extra Work*.

#### VI. REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5200-33	Hazardous Wildlife Attractants on or Near Airports
AC 150/5370-2	Operational Safety on Airports During Construction

ASTM International (ASTM)

ASTM D6461 Standard Specification for Silt Fence Materials

United States Department of Agriculture (USDA)

FAA/USDA Wildlife Hazard Management at Airports, A Manual for Airport Personnel

#### **END OF SECTION C-102**

#### SECTION C-105 MOBILIZATION

- **I. DESCRIPTION** This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.
- **II. MOBILIZATION LIMIT.** Mobilization shall be limited to 10 percent of the total project cost.
- III. POSTED NOTICES Prior to commencement of construction activities, the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Owner.

#### IV. ENGINEER / RPR FIELD OFFICE. NOT USED.

#### V. METHOD OF MEASUREMENT

- 1. Basis of measurement and payment. Based upon the contract lump sum price for "Mobilization" partial payments will be allowed as follows: No direct measurement or payment will be made for mobilization. It is included within the project lump sum price.
- 2. With first pay request, 5%.

a. When 10% or more of the original contract is earned, an additional 20%.

- **b.** When 25% or more of the original contract is earned, an additional 25%.
- c. When 50% or more of the original contract is earned, an additional 25%.
- **d.** When 75% or more of the original contract is earned, an additional 15%.

**e.** After Final Inspection, Staging area clean-up and delivery of all Project Closeout materials as required by Section 90, paragraph 90-11, *Contractor Final Project Documentation*, the final 10%.

#### VI. BASIS OF PAYMENT

#### 1. Payment will be made under:

Item C-105-2.1 Mobilization

#### VII. REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Office of Federal Contract Compliance Programs (OFCCP) Executive Order 11246, as amended EEOC-P/E-1 – Equal Employment Opportunity is the Law Poster United States Department of Labor, Wage and Hour Division (WHD) WH 1321 – Employee Rights under the Davis-Bacon Act Poster

#### **END OF SECTION C-105**

AIP – SAC 30596 – GENERAL CONSTRUCTION ITEM C-105

# SUPPLEMENTARY GENERAL CONDITIONS

## SAVANNAH AIRPORT COMMISSION

Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS AC 150/5370-10H

#### **SUPPLEMENTARY GENERAL CONDITIONS**

#### I. <u>PRECONSTRUCTION CONFERENCE</u>

A Preconstruction Conference will be scheduled immediately after the award of a construction contract. The successful Contractor shall be required to have key personnel from his staff attend this meeting.

#### II. <u>SEQUENCE OF WORK</u>

If so stated in this Section, the Contractor will follow the sequence of work as outlined. If there is no sequence of work outlined, the Contractor shall submit to the Engineer a sequence of construction prior to commencing work.

#### III. CONSTRUCTION SCHEDULE AND MONEY FLOW CHART

The Contractor will submit to the Owner a construction schedule, either CPM or bar chart, showing dates of commencing construction and each activity as they will be performed, including duration of each activity and completion date. This schedule must be completed and delivered to the Owner prior to issuance of the Notice to Proceed.

#### IV. COORDINATION OF WORK BY CONTRACTOR

Contractor will notify the Owner's representative, Project Engineer, Inspector, and Project Manager 24 hours in advance of any material being placed or work being performed that requires testing. If such notification is not made, any material placed or work done will be the responsibility of the Contractor and shall not be accepted by the Owner, unless satisfactory proof can be given to the Owner that such work met the required standard of testing for that item.

The Contractor shall notify the Owner's representative, Project Engineer, Inspector, and Project Manager 48 hours prior to making any change to his predetermined work schedule. Any change that would affect the operation of the airport or require rescheduling of the project must be approved by the Owner; otherwise, the project may be stopped, and any down time would be absorbed by the Contractor and, if applicable, could be charged as liquidated damages if the project exceeds the work days or calendar days stipulated in the contract.

#### V. WARRANTIES AND GUARANTEES

The Contractor will furnish to the Owner written warranties on all equipment and material furnished on this contract. The Contractor will guarantee to the Owner that he will replace, repair, and make good any and all failures of his work, including all labor and material required to repair or replace all failed work for a period of 12 months beginning at the date of written acceptance of the project. If an item fails or has to be replaced within that 12-month period, he will, upon replacement or repair, guarantee that item for an amount of time that will equal 12 months from the date of repair or replacement.

#### VI. AS BUILT PLANS

The Contractor will note on a set of plans any and all changes made to the plans, to include dimensions and reference points of the changes made. Any authorized changes made to the plans will be noted on the plans. All uncharted utilities or structures encountered during construction will be noted and located on the plans. This set of marked up as built plans will be submitted to the Owner prior to final payment being made on the project.

#### VII. ENGINEER'S FIELD OFFICE

NOT USED.

#### VIII. INSURANCE REQUIREMENTS

The Contractor shall obtain and maintain with a company or companies authorized to do business in the State of Georgia, and approved by the Savannah Airport Commission, such insurance as will protect the Commission, and Contractor, from claims set forth below which may arise out of or result from Contractor's operations under the contract and for which the Contractor is legally liable, which includes operations by subcontractors, subcontractor's/ subcontractors, or by any persons directly or indirectly employed by Contractor or Subcontractor.

- a. Claims under workers' compensation, disability benefit, and other similar employee benefit acts. Further, Contractor shall relieve the Commission from any costs due to accidents or other liabilities mentioned in workers' compensation act. Contractor or subcontractors with either an insufficient number of employees or in certain excluded occupational classifications are required to maintain WORKERS' compensation coverage on a voluntary basis regardless of the statutory regulations. If the Contractor is from a state other than Georgia, before work begins he shall take whatever measures are necessary to eliminate conflicts regarding which state is responsible for WORKERS' compensation claims.
- b. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees.
- c. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees.
- d. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by another person.
- e. Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- f. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.
- g. The insurance required by paragraph 8 above, shall be written for not less than the following amounts, or greater if required by law:

#### Workers' Compensation:

#### Georgia Statutory

Employer's Liability, including all states

\$1,000,000 - each accident \$1,000,000 - disease - policy limit \$1,000,000 - disease - each employee

<u>Comprehensive General Liability:</u> shall include all major divisions of coverage and be on a comprehensive basis including, but not limited to:

Premises, operations, including explosion, collapse and underground; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage including completed operations; Contractual Liability; Personal Injury Liability with employment exclusion deleted. Must include projects at airports.

Bodily Injury and Property Damage Limits: \$1,000,000 combined single limit, each occurrence

<u>Products and Completed Operations:</u> Insurance to be maintained for three (3) years after issuance of the final certificate for payment.

Mobile Equip/Comprehensive Vehicle Liability:

(Owned, non-owned, and hired.)

Bodily Injury/Property Damage Combined:

\$1,000,000 combined single limit, each occurrence

Umbrella/Excess Liability:

Umbrella/Excess Liability insurance covering all liability lines excess of the primary limits. The total limits of liability for each coverage including primary and umbrella coverages shall be no less than \$5,000,000 combined single limit – each occurrence.

#### Builders Risk (Property Insurance): (IF APPLICABLE TO THE TYPE OF CONSTRUCTION)

Shall be purchased and maintained by the Contractor covering the entire Work at the site to the full insurable value thereof, including stockpiled material at the construction site intended for incorporation into the project.

Also, such insurance shall be in a company or companies against which Commission has no reasonable objection, and shall include the interest of the Commission, the Contractor, and Subcontractors in the Work. Such insurance shall insure against the perils of Fire, Extended Coverage, Theft, Vandalism and Malicious Mischief, and all other risks. If the Commission is damaged by the failure of the Contractor to maintain such insurance and to so notify the Commission, then the Contractor shall bear all reasonable costs properly attributable thereto. If not covered under such insurance or otherwise provided in the contract documents applicable to constructions, the Contractor shall effect and maintain similar Property Insurance on the Work stored off the site or in transit when such portions of the work are to be included in an application for payment under the contract.

The insurance required above should include contractual liability insurance applicable to the Contractor's obligations.

#### h. <u>Detailed Information Relating to Insurance:</u>

The Savannah Airport Commission requires that ALL LIABILITY POLICIES must be **ENDORSED** to include the **Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, its officers, directors, agents and employees as <u>ADDITIONAL INSURED</u>. This must be reflected on the Certificate of Insurance which shall be furnished to the Commission. The Certificate of Insurance shall evidence proper limits of coverage as set forth herein and that the policy or policies will not be cancelled or modified without thirty (30) days prior written notice thereof is given to the Savannah Airport Commission. The Certificate shall also reflect that all policies have been endorsed to include waivers of any and all subrogation. The Contractor shall also require its subcontractors and subcontractors/subcontractors to endorse their policies to include the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, its officers, directors, agents and employees as <u>ADDITIONAL INSURED</u>.** 

The extent of coverage or limits of liability provided under the policies procured by the Contractor and/or Subcontractors shall not be construed to be a limitation on the nature or extent of the Contractor's obligations or to relieve the Contractor of any such obligations or representation by the Savannah Airport Commission as to the adequacy of the insurance to protect the Contractor against the obligations imposed on him by law or by this or any other contract. All policies shall be primary and non-contributory.

Immediate notification must be given to the Savannah Airport Commission and/or its agent upon receiving any knowledge or notification of claim or litigation on which the Savannah Airport Commission may be named.

The Contractor shall indemnify, protect, defend, and hold completely harmless the Commission, and its officers, agents and employees from and against any and all liabilities, losses, suits, claims, judgments, fines, or demands arising by reason of injury or death of any person or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorney fees, court costs, and expert fees), of any nature whatsoever arising out of or incident to this contract and/or the use of occupancy of the leased premises or the acts or omissions of Contractor's officers, agents, employees, contractors, subcontractors, licensees, or invitees, regardless of where the injury, death, or damage may occur, unless such injury, death or damage is caused by the sole negligence of the Commission. The Commission shall give to Contractor reasonable notice of any such claims or actions. The Contractor shall also use counsel reasonably acceptable to Commission in carrying out its obligations hereunder.

All policies shall be endorsed to include waivers of any and all subrogation.

#### IX. <u>AFFIDAVIT/FINAL PAYMENT</u>

Before the final payment under this contract is made, the Contractor shall submit to the Owner a Contractor's Affidavit of Payment of Debts, Claims and Release of Liens. Forms will be furnished by the Owner.

#### X. PREVAILING WAGE RATES

The Construction wage rates have been furnished and compiled by the City of Savannah as those prevailing for construction of projects in the Chatham County area. In accordance with the terms of the Proposal, the Contractor agrees to pay to each employee of the corresponding craft at least the wage rate listed.

In addition to the basic hourly rates shown, certain crafts, trades, or industries indicate health, welfare, pension and other fringe benefits which are given employees pursuant to a bona fide Collective Bargaining Agreement for the respective craft, trade, or industry. In the absence of any such Agreement, the basic hourly rates plus the monetary equivalent for the fringe benefit payments indicated, less any legal deductions, shall be paid directly to the employees.

If the wage rate determination of the U. S. Department of Labor incorporated in the following page does not include rates for requested classifications, the Bidder is responsible for ascertaining the rates payable for such classifications and whether area practice requires their use in accomplishing the work. No inference concerning area practice is to be drawn from this omission. Further, the omission will not, per se, establish any liability for increased labor cost resulting from the use of such classifications.

The Contractor and Subcontractors at any tier shall make and submit a copy of, to the Savannah Airport Commission, within seven (7) days, a record of all payments for labor with an affidavit that the weekly wages paid are not less than the applicable wage rates contained in the wage determination incorporated into the contract and that the classifications set forth therein for each laborer and mechanic conforms with the work he/she performed. Such records shall contain the name of the individual, his/her classification, the hourly rate, the number of hours worked, and the total amount paid including any and all deductions/withholdings for all individuals who provided and were paid via any means for labor on this project. Records shall be made, and copies provided to the Owner with each pay request, of all payments of any kind (including cash, check, voucher, or any other type of remuneration) to any individual (including employees, subcontractors, independent contractors, day laborers, or anybody else) who performed labor on this project for any kind of compensation whatsoever. Every pay request shall also include a copy of a record of Workers' compensation paid for any and all persons paid in any manner for labor of any type on this project.

The Contractor shall post and maintain a copy of the wage determination at the Contractor's field office or any other location as directed by the Savannah Airport Commission.

The Contractor and all Subcontractors, at any tier, shall maintain for a period of not less than three (3) years from the date of final payment all books, records, documents, and papers pertaining to the contract.

The Contractor and all Subcontractors, at any tier, shall provide to the City of Savannah, the Savannah Airport Commission, the FAA or any other Federal or State agency, the Comptroller General of the United States, or any of their duly authorized representatives access to all such books, documents, papers and records, pertaining to the contract for the purpose of examining, auditing and copying them.

#### XI. <u>SAFETY</u>

- a. Airport safety is an extremely important element of managing and operating today's airport. Specific rules, regulations, advisory circulars and guidelines are placed upon the airport owner/operator to improve safety on airports and to protect its users, tenants, and neighbors.
  - 1. <u>Entry into the Air Operations Area</u> Entry shall be by gate(s) designated by the Executive Director or his representative. The Contractor shall be responsible for gate security. No personal vehicles owned by Contractor's employees or subcontractors shall be allowed on the airfield at any time.
  - 2. <u>Communications</u> Radio contact with the control tower must be maintained by all Contractor vehicles on the airfield. Vehicles must contact the control tower upon entering active runway, taxiway, or apron area where aircraft are moving or are subject to move; and if working within five hundred (500) feet of the centerline of any active runway or two hundred (200) feet of the centerline of any (active) taxiway, the Contractor shall maintain radio contact with the control tower at all times. If the Contractor has vehicles with no radio, then such vehicles shall form a convoy and follow a vehicle having two-way radio contact with the control tower. Contractors working in runway clear zones shall maintain constant radio contact with the control tower. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING THEIR OWN RADIOS.

The Contractor shall reimburse the Airport Commission for the full amount of any fines placed on the Airport Commission due to an unauthorized crossing of an active runway or taxiway by the Contractor or any of his subcontractors.

- 3. <u>Flags</u> All vehicles, upon entering the Air Operations Area shall display an orange and white checkered flag, staff mounted, of not less than three (3) feet square displayed on the vehicle. Cranes, backhoes, and similar equipment working within five hundred (500) feet of the centerline or runways and two hundred (200) feet of taxiways and in clear zones, shall display the same size and type of flag specified for vehicles attached to the boom. Crane booms shall be lowered when not in use.
- 4. <u>Airport Rules and Regulations</u> Contractor(s) shall be responsible for informing all employees concerning pertinent airport and Federal Aviation Administration rules and regulations. Contractor(s) shall conform with all rules and regulations and directives issued either orally or in writing by the Executive Director or his representative. All pertinent local, state and federal safety requirements shall be observed by the Contractor(s) and Contractor(s)' personnel.
- 5. <u>Storage Area</u>
  - (a) Material or personal vehicular storage area shall be assigned by the Executive Director or his representative.
  - (b) Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free unobstructed movement of aircraft.
  - (c) Loose materials capable of causing damage to aircraft landing gears, propellers, or being ingested in jet engines, shall not be stored on or around active aircraft movement areas.
  - (d) Stockpiled material will be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions in excess of 10 knots. Stockpiled material shall be prominently marked with orange flags and lighted with flashing yellow lights during hours of restricted visibility.

- 6. Open Trenches
  - (a) All open trenches, excavations within the Air Operations Area, shall be marked by lighted and weighted barricades. Barricades shall be alternate orange and white markings with flashing yellow lights and a maximum of 18 inches in height. Barricades adjacent to runways or taxiway pavement areas shall be required to be secured in such manner to prevent tipping over. Flags shall be orange and white, staff mounted, and not less than 20" x 20". All barricades shall be subject to approval by the Executive Director. The Contractor shall provide the name and phone number of three individuals to be on call 24 hours per day for emergency maintenance of barricade lighting. The Contractor is responsible for maintaining the flags and lights on the barricades.
  - (b) All construction work closer than one hundred twenty-five (125) feet of the edge of a runway or eighty-five (85) feet from the edge of a taxiway will require temporary closing of the runway or taxiway. Temporarily closed taxiways shall be marked by lighted and flagged barricades as stated in Paragraph (6)a. Temporarily closed runways shall be marked with a cross placed on the runway numbers. Minimum dimensions of the areas of the cross shall be a length of sixty (60) feet and a width of eight (8) feet. Crosses are to be painted yellow and secured in such a manner to prevent damage from high winds. Frames may be constructed of fabric or plywood. Material used for the construction is subject to approval by the Executive Director.
  - (c) Prior to beginning any excavation within two hundred (200) feet of the centerline of any runway or taxiway, the Contractor shall notify the Executive Director or his representative. All trench excavation within the Air Operations Area shall be backfilled and compacted at the end of each workday.
  - (d) Construction equipment or material shall not be stored within the Air Operations Area during hours of restricted visibility or darkness without the approval of the Executive Director or his representative.
  - (e) Open flame welding or torch cutting operations are prohibited unless fire and safety precautions are provided in accordance with NFPA codes and approved by the Owner.
- 7. <u>Motorized Vehicles</u>
  - (a) Vehicular traffic crossing active aircraft movement areas (runways, taxiways or aircraft parking aprons) shall be controlled either by two-way radio contact with the control tower, by escort, flagman, signal lights, or other appropriate means as approved by the FAA Control Tower Chief. After receiving clearance from the Control Tower, the driver's personal observation that no aircraft is approaching his position will be made before he makes any crossing of active taxiway or runway. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING HIS OWN RADIOS.
  - (b) Contractor(s) shall post two (2) crossing guards, one (1) on each side of all active aircraft movement areas (runways, taxiways and aircraft movement areas (runways, taxiways and aircraft parking aprons). Each crossing guard shall be equipped with a portable two-way radio (121.90 MHz) and maintain constant radio contact with the control tower. All vehicular traffic shall come to a complete stop at all active aircraft movement areas and shall not proceed into active aircraft movement areas without authorization from the control tower. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING HIS OWN RADIOS.
  - (c) If it is desirable to clearly identify the vehicles for control purposes by either assigned initials or numbers, then the identifying symbol shall be of eight- (8) inch minimum, block-style character of a color easily read. Symbols may be applied by use of tape or water-soluble paint.

- (d) Motorized vehicles and equipment operating in the AOA shall not exceed fifteen (15) miles per hour.
- (e) Aircraft shall have priority over all motorized vehicles and equipment.
- 8. <u>Debris</u>
  - (a) Waste and loose material capable of causing damage to aircraft shall not be placed on active aircraft movement areas. Material tracked on these areas shall be removed continuously during the work project. (A/C 150/5370-2C)
  - (b) Debris shall be disposed of in the manner designated by the Executive Director or his representative.
- 9. <u>NOTAMS</u> Construction NOTAMS shall be issued by the Executive Director or his representative. Construction causing runway or taxiway closures shall be kept to a minimum and scheduled closures shall be discussed with the Executive Director or his representative as far in advance as possible, but not less than forty-eight (48) hours in advance. Landing and taking off of scheduled airlines shall have priority.
- 10. <u>Burning</u> Burning is permitted on airport property by obtaining a permit from local governmental agencies and Airport Fire Department.
- 11. <u>Erosion</u> Contractor(s) shall consider permanent means of control or prevention of soil erosion not only to preserve and protect the slopes, pavement and other facilities, but also to reduce potential sources of water pollution.
- 12. <u>Accidents</u> All accidents causing personal injury or property damage shall be reported to the Executive Director or his representative immediately. The contractor(s) shall provide, at the site, such equipment and medical facilities as are necessary to supply first aid service to anyone who may be injured in connection with the performance of the work, whether on or adjacent to the site, which causes death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone to the Executive Director or his representative and the Project Engineer.
- 13. All electrical and Control cables shall be buried a minimum of thirty-six (36) inches below the surface of the ground.

#### XII. <u>SECURITY</u>

Contractor shall be responsible for the security of his equipment and materials. He shall be responsible for the security of all perimeter security gates, terminal doors and hatches leading to secure areas utilized by him. As directed by the Executive Director, locks shall be placed on each gate used by the Contractor. The locks must be marked in a manner showing company ownership and a key or combination provided to the Airport Public Safety Department. The gates shall be locked at all times or guards posted at the gates to control access through them. Gate guards shall have a radio or cellular phone which will enable them to call the Police to report security problems or the contractor to verify identities, etc. For joint use gates, if a lock is found unsecured, the company owning the lock is in violation of Airport Rules and Regulations. In addition, unauthorized entry to the Air Operations Area through the gates may result in the responsible party being cited for violating Airport Regulations.

- a. The Transportation Security Administration Act 2002, 49 USC, 67FR8355, gives the Transportation Security Administration (TSA) authority to place a fine on any airport found to be in breach of a security requirement.
- b. The Contractor shall reimburse the Airport Commission for the full amount of any fines placed on the Airport Commission due to negligence on the part of the Contractor. Fines may be placed on the Airport Commission for such things as security gates being unlocked, terminal doors not secure,

fences torn down, and Air Operations Area not being properly secured. These are only examples of items causing fines and not limitations. There could be other related items.

- c. It is the Contractor's responsibility to prevent any breach of security within his area of construction or any route of entry to area of construction.
- d. <u>Security Clearances</u> All personnel having unescorted access to any security area shall wear valid Savannah International Airport identification badges so they are visible <u>on their outer garments</u> in such areas <u>at all times</u> to permit ready recognition by Airport Public Safety Officers. Contractors' employees may be issued any one of the below listed Security Identification, etc. badges.
  - 1. The Airport Identification Badges are issued to approved personnel in several colors:
    - (a) Blue Issued to personnel requiring unlimited access inside the secured SIDA.
      - (1) Effective December 6, 2002, the TSA requires anyone requesting unescorted access to the secured SIDA shall be fingerprinted, a background check performed, and results returned prior to ID Badge being issued. No exceptions. This process takes 3-14 days. Anyone applying for badges shall submit application as soon as possible to ensure fingerprints / criminal history records are returned prior to start date of project.
        - (2) The cost for processing is \$30.00 for fingerprinting and \$25.00 per badge, per person. Everyone receiving a SIDA ID Badge must be fingerprinted.
    - (b) Yellow Issued to contractors working in the vicinity of the aircraft movement area in order to perform their required duties. Persons with yellow badges may NOT enter the secured SIDA.
    - (c) Grey Issued to general aviation and tenants who require incidental access to the 1542.203 areas. Persons with **Grey** badges may NOT enter the secured SIDA.
  - 2. The color of the badge signifies the area on the airport where the badge holder may operate.
    - (a) Identification badges must be controlled at all times. When personnel are terminated, upon completion of the construction project, and when badges expire, the Contractor is responsible for returning identification badges to the Airport Public Safety Department. Before a new badge is issued to any person, their expired or invalid badge must be returned to the Airport Public Safety Department.

Upon completion of a project, it will be the responsibility of the General Contractor to collect all badges issued under his contract. Subcontractors are responsible for collecting their badges. Before final payment is made on the project, a written notification from the Airport Public Safety Department will be given to the Director of Engineering. The written notice will state the number of badges issued and the number of badges returned.

- (b) A fee of \$20.00 (without reader), \$25.00 (with reader), payable in advance, is charged for each badge issued. Each Contractor and subcontractor shall make a cash deposit of \$200 prior to receiving any badges. This deposit is refundable providing all badges have been returned. For each badge not returned by the Contractor or subcontractor, \$200.00 will be deducted from any monies due the Contractor or his surety. All costs, i.e., ID Badge, fingerprint requirements, and deposit(s) shall be paid in advance.
- (c) The Contractor shall be required to comply with the Transportation Security Administration Amendment to Part 1542.209 prior to commencing work. All personnel hired after December 6, 2002, who have unescorted access to any area on the airport controlled for security reasons shall have background checks to the extent allowable by law, including at a minimum, references and prior employment

histories to the extent necessary to verify representations made by the employee/applicant relative to employment in the preceding ten (10) years. If there are significant periods of unaccountable time, the background period is extended to ten years if the Contractor is to work in the SIDA. The Contractor shall certify to the Commission by using SAC Form 513 that such checks were conducted and are on file in the Contractor's office for inspection by the Transportation Security Administration (TSA) or Savannah Airport Commission representatives.

- (d) The Contractor shall designate a Signatory Authority and provide the name of the signatory to the Savannah Airport Commission. The Signatory Authority functions as the certification officer for the company and is required to fulfill the following additional requirements associated with Signatory Authority.
  - i. Initial Signatory Training.
  - ii. Annual recurrent signatory training.
  - iii. SIDA Training.
  - iv. Failure to designate a Signatory or failure of this Signatory to complete the training requirement will be cause for the SAC to cease issuing badges for the contractor.
- (e) SAC Form 513 shall be used by the Contractor whenever certifying identification badges. Only the Contractor Signatory Authority, who shall be designated in writing, shall sign SAC Form 513.
- (f) All badge requests and background forms shall be turned in forty-eight (48) hours in advance. Once approved, all badge holders shall attend SIDA Contractor's badge and/or airfield drivers training classes.
- (g) Any person found within any security restricted area without proper identification shall be in violation of Federal law and the Airport Rules and Regulations. All such persons shall be escorted off the Air Operations Area and may be cited by the Airport Public Safety Department. In addition, the person may have their identification badge revoked.
- (h) Any delay in construction of project due to violations of Federal or Airport Regulations shall be absorbed by the Contractor and not the Airport Commission.

#### XIII. <u>PROTECTION OF AIRPORT, CABLES, CONTROLS, NAVAIDS, AND WEATHER BUREAU</u> <u>FACILITIES</u>

a. The Contractor is hereby informed that there are installed on the airport FAA Navaids, including, without limitation, ASR, UHF and VHF receivers and transmitters; U. S. Weather Bureau facilities; airfield lighting systems; electric cables and controls relating to such Navaids and facilities. Such Navaids, Weather Bureau and other facilities, and electric cables must be fully protected during the entire construction time. Work under this contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time.

Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason determined by the Engineer acting under the orders and instructions of the airport management and the designated FAA representative. Any instructions to this Contractor to clear any given area, at any time, by the Engineer, the Airport Management, or the FAA Control Tower (by radio or other means) shall be immediately executed. Construction work will be commenced in the cleared areas only when additional instructions are issued by the Engineer.

b. Power and control cables leading to and from any FAA Navaids, Weather Bureau and other facilities, will be marked in the field by the local FAA Airway Facilities Sector personnel or the Engineer for the information of the Contractor, before any work in their general vicinity is started. Thereafter, through the entire time of this construction, the Contractor shall not allow any construction equipment to cross these cables without first protecting the cable with steel boiler

plate, or similar structural devices, on three feet either side of the marked cable route. All excavation within three feet of existing cables shall be accomplished by hand digging only. The Contractor will be penalized an amount of \$1,000 per instance if during his work he cuts a marked cable.

c. The Contractor shall immediately repair, at this own expense with identical material by skilled workmen, any underground cables serving FAA Navaids, Weather Bureau and other airport facilities which are damaged by his workmen, equipment, or work. Prior approval of the Engineer must be obtained for the materials, temporary or permanent repairs the Contractor proposed to make to any other airport facilities and cables damaged by this Contractor. Should the repair require splicing, it shall be spliced at the discretion of the local FAA Airway Facilities Sector Manager as to who shall perform the work. Where the FAA performs the work, it shall be at the Contractor's expense. No work shall be backfilled or covered prior to approval by the Airway Facilities Sector Manager.

#### XIV. CONSTRUCTION TIME AND LIQUIDATED DAMAGES

- a. The construction plans describe the scope of work.
- b. All construction shall be completed within the contract time of **344** calendar days.
- c. When given contract is incomplete at the expiration of the number of calendar days allowed, liquidated damages will be applied per calendar day until the day and date the phase is complete. Liquidated damages will be deducted from any money due or to become due to the Contractor or his Surety.

Phase	Calendar Day Allowed Per Phase	Liquidated Damages Per
		Calendar Day
Mobilization	30	\$1000
Phase 1	150	\$1000
Phase 2	60	\$2000
Phase 3	150	\$1000
Substantial Completion	14	\$1000
Entire Project	344	\$2000

#### **CONSTRUCTION TIME FRAME & LIQUIDATED DAMAGES:**

#### TOTAL CONTRACT TIME IS <u>344</u> CALENDAR DAYS.

#### XV. <u>PERMITS</u>

The Contractor shall be responsible for obtaining any and all licenses and permits to conduct the work as may be prescribed by the federal government, State of Georgia, Chatham County or the City of Savannah. Any fee or expenses associated in obtaining any license or permit shall be paid by the Contractor.

#### XVI. <u>GOVERNING LAW</u>

This Agreement shall be deemed to be made in and construed in accordance with the laws of the State of Georgia.

#### XVII. <u>INDEMNIFICATION</u>

Contractor shall protect, defend, and indemnify Commission and its officers, agents and employees from and against any and all liabilities, losses, suits, claims, judgments, fines or demands arising by reasons of injury or death of any person, or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorney fees, court costs, and expert fees), of any nature whatsoever arising out of or incident to this Agreement and/or the use or occupancy of the Premises or the acts or omissions of contractor's officers, agents, employees, contractors, subcontractors, licensees, or invitees, regardless of where the injury, death or damage may occur, unless such injury, death, or damage is caused by the sole negligence of the Commission. The Commission shall give to contractor reasonable notice of any such claims or actions. The Contractor shall also use counsel reasonably acceptable to Commission in carrying out its obligations hereunder. The provisions of this section shall survive the expiration or early termination of this Agreement.

#### XVIII. NONDISCRIMINATION

(As required by Title VI of the Civil Rights Act of 1964; Department of Transportation 49 CFR Part 21; and Section 520 of the Airport and Airway Improvement Act of 1982).

Contractor shall comply with and shall ensure that the following Non-Discrimination clause is inserted in all subcontracts, subleases, and other agreements at all tiers:

"The Contractor assures that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance."

#### END OF SUPPLEMENTARY GENERAL CONDITIONS

#### DAVIS BACON WAGE RATES

General Decision Number: GA2020229 01/01/2021 Superseded General Decision Number: GA20200229 State: Georgia Construction Type: Highway

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Datas

Esteration

Modification Number	Publication Date
0	01/01/2021

SUGA2014-063 10/03/2016

	Rates	Fringes
CARPENTER, Includes Form Work	\$ 17.46	0.00
CEMENT MASON/CONCRETE FINISHER	\$ 17.62	0.00
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine)	\$ 12.39	1.94
IRONWORKER, REINFORCING	\$ 15.46	0.00
IRONWORKER, STRUCTURAL	\$ 15.13	0.00
LABORER: Grade Checker	\$ 11.45	0.00
LABORER: Mason Tender - Cement/Concrete	\$ 11.44	0.00
LABORER: Pipelayer	\$ 11.09	0.00
LABORER: Asphalt (Includes Distributor, Raker, Screed, Shoveler, and Spreader)	\$ 11.95	0.00
LABORER: Common or General, Includes Erosion Control	\$ 10.97	0.00

OPERATOR: Backhoe/Excavator/Trackhoe	\$ 17.47	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader	\$ 12.22	0.00
OPERATOR: Broom/Sweeper	\$ 14.04	1.43
OPERATOR: Bulldozer	\$ 17.03	0.00
OPERATOR: Compactor	\$ 14.04	0.00
OPERATOR: Concrete Saw	\$ 18.47	0.00
OPERATOR: Crane	\$ 24.38	0.00
OPERATOR: Grader/Blade	\$ 18.18	0.00
OPERATOR: Hydroseeder	\$ 13.93	0.00
OPERATOR: Loader	\$ 15.16	0.00
OPERATOR: Mechanic	\$ 19.85	0.00
OPERATOR: Milling Machine	\$ 16.20	1.64
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	\$ 14.98	0.00
OPERATOR: Piledriver	\$ 16.70	0.00
OPERATOR: Roller	\$ 14.57	0.00
OPERATOR: Scraper	\$ 12.64	0.00
OPERATOR: Screed	\$ 17.53	0.00
PAINTER: Spray	\$ 23.30	0.00
TRAFFIC CONTROL: Flagger	\$ 12.20	0.00
Laborer-Cones/Barricades/Barrels/ Setter/Mover/Sweeper	\$ 12.55	0.00
TRAFFIC SIGNALIZATION: Laborer	\$ 13.40	0.00
TRAFFIC SIGNALIZATION: Electrician	\$ 20.20	0.00
TRUCK DRIVER: Dump Truck	\$ 13.72	0.00

AIP – SAC 30596 – DAVIS BACON WAGE RATES, HIGHWAY

Flatbed Truck	\$ 14.96	1.19
Hydroseeder Truck	\$ 14.92	0.00
Lowboy Truck	\$ 16.26	0.00
Off the Road Truck	\$ 12.38	0.00
Water Truck	\$ 14.00	0.00
Semi/Trailer Truck	\$ 16.13	0.00
WEI DEDS - Dessive note messarihed for such asferming		
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.		

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <a href="http://www.dol.gov/whd/govcontracts">www.dol.gov/whd/govcontracts</a>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### **Union Rate Identifiers**

A four-letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

#### WAGE DETERMINATION APPEALS PROCESS

1. Has there been an initial decision in the matter? This can be:

- an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2. and 3. should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations.

Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210 2. If the answer to the question in 1. is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).

Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3. If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board).

Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4. All decisions by the Administrative Review Board are final.

#### END OF DAVIS BACON WAGE RATES

# TECHNICAL SPECIFICATIONS

### SAVANNAH AIRPORT COMMISSION

Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS AC 150/5370-10H

#### **ITEM P-200 GDOT STANDARD SPECIFICATIONS**

#### PART 1 – GENERAL

#### 1.1 GDOT SPECIFICATIONS

- a. The construction details which will govern the prosecution of the work as set out in the proposal and/or shown on the plans shall conform in their entirety to the Georgia Department of Transportation Standard Specifications for Construction of Transportation Systems, including Supplements and as modified hereinafter.
- b. The construction details contained within which are not required to accomplish the work set out in proposal and/or shown on the plans will have no application to these specifications.
- c. These standard specifications may be obtained from:

Georgia Department of Transportation One Georgia Center 600 West Peachtree Street NW Atlanta, GA 30308 (404) 631-1990

#### Specifications are available online at:

http://www.dot.ga.gov

d. The Contractor shall have at least one set of the standard specifications available on the project.

#### **1.2 CONFLICT RESOLUTION**

- a. In the event of any conflict(s) between the Contract Documents and the GDOT Standard Specifications, the precedence in resolving such conflict(s) shall be as follows:
  - 1. Bidding, Contract Requirements, Contract Drawings and Technical Specifications for this project outlined in the contract documents shall govern over GDOT Bid and Contract Requirements.
  - 2. Greater Quantities shall govern the lesser.
  - 3. Higher quality and/or more stringent requirements as adjudged by the Engineer shall govern over lesser.
- b. Where GDOT Specifications refer to the "Engineer", it shall be understood to mean the Engineer of the Owner as Stated in the CONTRACT.

#### PART 2 – EXECUTION

#### 2.1 MEASUREMENT AND PAYMENT

Method of measurement and basis of payment for material and work performed in conformance with the above specifications shall be as indicated on the BID SCHEDULE at the unit shown on the bid schedule. The costs bid shall be full compensation for labor, equipment, materials and n necessary to complete the work in conformance with the Plans and Specification to the satisfaction of the Owner. Incidentals include, but are not limited to, items which have specific DOT bid item numbers in the referenced specifications but are not included in the Bid Schedule.

#### END OF ITEM P-200

#### **ITEM P-101 PREPARATION/REMOVAL OF EXISTING PAVEMENTS**

#### DESCRIPTION

**101-1** This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.

#### **EQUIPMENT AND MATERIALS**

**101-2** All equipment and materials shall be specified here and in the following paragraphs or approved by the Resident Project Representative (RPR). The equipment shall not cause damage to the pavement to remain in place.

#### CONSTRUCTION

#### 101-3.1 Removal of existing pavement.

The Contractor's removal operation shall be controlled to not damage adjacent pavement structure, and base material, cables, utility ducts, pipelines, or drainage structures which are to remain under the pavement.

**a.** Concrete pavement removal. Full depth saw cuts shall be made perpendicular to the slab surface. The Contractor shall saw through the full depth of the slab including any dowels at the joint, removing the pavement and installing new dowels as shown on the plans and per the specifications. Where the perimeter of the removal limits is not located on the joint and there are no dowels present, the perimeter shall be saw cut the full depth of the pavement. The pavement inside the saw cut shall be removed by methods which will not cause distress in the pavement which is to remain in place. Concrete slabs that are damaged by under breaking shall be repaired or removed and replaced as directed by the RPR.

The edge of existing concrete pavement against which new pavement abuts shall be protected from damage at all times. Spall and underbreak repair shall be in accordance with the plans. Any underlaying material that is to remain in place, shall be recompacted and/or replaced as shown on the plans. Adjacent areas damaged during repair shall be repaired or replaced at the Contractor's expense.

**b.** Asphalt pavement removal. Asphalt pavement to be removed shall be cut to the full depth of the asphalt pavement around the perimeter of the area to be removed. The material is to be wasted off the airport site.

**c. Repair or removal of Base, Subbase, and/or Subgrade.** All failed material including surface, base course, subbase course, and subgrade shall be removed and repaired as shown on the plans or as directed by the RPR. Materials and methods of construction shall comply with the applicable sections of these specifications. Any damage caused by Contractor's removal process shall be repaired at the Contractor's expense.

**101-3.2 Preparation of joints and cracks prior to overlay/surface treatment.** Remove all vegetation and debris from cracks to a minimum depth of 1 inch (25 mm). If extensive vegetation exists, treat the specific area with a concentrated solution of a water-based herbicide approved by the RPR. Fill all cracks greater than 1/4 inch (6 mm) wide) with a crack sealant per ASTM D6690. The crack sealant, preparation, and application shall be compatible with the surface treatment/overlay to be used. To minimize contamination of the asphalt with the crack sealant, underfill the crack sealant a minimum of 1/8 inch (3 mm), not to exceed <sup>1</sup>/4 inch (6 mm). Any excess joint or crack sealer shall be removed from the pavement surface.

Wider cracks (over 1-1/2-inch-wide (38 mm)), along with soft or sunken spots, indicate that the pavement or the pavement base should be repaired or replaced as stated below.

Cracks and joints may be filled with a mixture of emulsified asphalt and aggregate. The aggregate shall consist of limestone, volcanic ash, sand, or other material that will cure to form a hard substance. The combined gradation shall be as shown in the following table.

Sieve Size	Percent Passing
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	90-100
No. 16 (1.18 mm)	65-90
No. 30 (600 µm)	40-60
No. 50 (300 µm)	25-42
No. 100 (150 µm)	15-30
No. 200 (75 µm)	10-20

#### Gradation

Up to 3% cement can be added to accelerate the set time. The mixture shall not contain more than 20% natural sand without approval in writing from the RPR.

The proportions of asphalt emulsion and aggregate shall be determined in the field and may be varied to facilitate construction requirements. Normally, these proportions will be approximately one-part asphalt emulsion to five parts aggregate by volume. The material shall be poured or placed into the joints or cracks and compacted to form a voidless mass. The joint or crack shall be filled to within +0 to -1/8 inches (+0 to -3 mm) of the surface. Any material spilled outside the width of the joint shall be removed from the pavement surface prior to constructing the overlay. Where concrete overlays are to be constructed, only the excess joint material on the pavement surface and vegetation in the joints need to be removed.

**101-3.3 Removal of Foreign Substances/contaminates prior to overlay or remarking.** Removal of foreign substances/contaminates from existing pavement that will affect the bond of the new treatment shall consist of removal of rubber, fuel spills, oil, crack sealer, at least 90% of paint, and other foreign substances from the surface of the pavement. Areas that require removal are designated on the plans and as directed by the RPR in the field during construction.

High-pressure water, rotary grinding or sandblasting may be used. Removal methods used shall not cause major damage to the pavement, or to any structure or utility within or adjacent to the work area. Major damage is defined as changing the properties of the pavement, removal of asphalt causing the aggregate to ravel, or removing pavement over 1/8 inch (3 mm) deep. If it is deemed by the RPR that damage to the existing pavement is caused by operational error, such as permitting the application method to dwell in one location for too long, the Contractor shall repair the damaged area without compensation and as directed by the RPR.

Removal of foreign substances shall not proceed until approved by the RPR. Water used for high-pressure water equipment shall be provided by the Contractor at the Contractor's expense. No material shall be deposited on the pavement shoulders. All wastes shall be disposed of in areas indicated in this specification or shown on the plans.

#### 101-3.4 Concrete spall or failed asphaltic concrete pavement repair.

**a. Repair of concrete spalls in areas to be overlaid with asphalt.** The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The perimeter of the repair shall be saw cut a minimum of 2-inches (50 mm) outside the affected area and 2-inches (50 mm) deep. The deteriorated material shall be removed to a depth where the existing material is firm or cannot be easily removed with a geologist pick. The removed area shall be filled with asphalt mixture with aggregate sized appropriately for the depth of the patch. The material shall be compacted with equipment approved by the RPR until the material is dense and no movement or marks are visible. The material shall not be placed in lifts over 4-inches (100 mm) in depth. This method of repair applies only to pavement to be overlaid.

**b.** Asphalt pavement repair. The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The failed areas shall be removed as specified in paragraph 101-3.1b. All failed material including surface, base course, subbase course, and subgrade shall be removed. Materials and methods of construction shall comply with the applicable sections of these specifications.

**101-3.5 Cold milling.** Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface. The milling machine or grinder shall operate without tearing or gouging the underlaying surface. The milling machine or grinder shall be equipped with grade and slope controls, and a positive means of dust control. All millings shall be removed and disposed off Airport property. If the Contractor mills or grinds deeper or wider than the plans specify, the Contractor shall replace the material removed with new material at the Contractor's Expense.

**a. Patching.** The milling machine shall be capable of cutting a vertical edge without chipping or spalling the edges of the remaining pavement and it shall have a positive method of controlling the depth of cut. The RPR shall layout the area to be milled with a straightedge in increments of 1-foot (30 cm) widths. The area to be milled shall cover only the failed area. Any excessive area that is milled because the Contractor doesn't have the appropriate milling machine, or areas that are damaged because of his negligence, shall be repaired by the Contractor at the Contractor's Expense.

**b.** Profiling, grade correction, or surface correction. The milling machine shall have a minimum width of 7 feet, and it shall be equipped with electronic grade control devices that will cut the surface to the grade specified. The tolerances shall be maintained within +0 inch and -1/4 inch (+0 mm and -6mm) of the specified grade. The machine must cut vertical edges and have a positive method of dust control. The machine must have the ability to remove the millings or cuttings from the pavement and load them into a truck. All millings shall be removed and disposed of off the airport.

**c. Clean-up.** The Contractor shall sweep the milled surface daily and immediately after the milling until all residual materials are removed from the pavement surface. Prior to paving, the Contractor shall wet down the milled pavement and thoroughly sweep and/or blow the surface to remove loose residual material. Waste materials shall be collected and removed from the pavement surface and adjacent areas by sweeping or vacuuming. Waste materials shall be removed and disposed off of Airport property.

**101-3.6 Preparation of asphalt pavement surfaces prior to surface treatment.** Existing asphalt pavements to be treated with a surface treatment shall be prepared as follows:

**a.** Patch asphalt pavement surfaces that have been softened by petroleum derivatives or have failed due to any other cause. Remove damaged pavement to the full depth of the damage and replace with new asphalt pavement similar to that of the existing pavement in accordance with paragraph 101-3.4b.

b. Repair joints and cracks in accordance with paragraph 101-3.2.

**c.** Remove oil or grease that has not penetrated the asphalt pavement by scrubbing with a detergent and washing thoroughly with clean water. After cleaning, treat these areas with an oil spot primer.

**d.** Clean pavement surface immediately prior to placing the surface treatment so that it is free of dust, dirt, grease, vegetation, oil or any type of objectionable surface film.

**101-3.7 Maintenance**. The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the RPR. The surface shall be kept clean and free from foreign material. The pavement shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.

**101-3.8 Preparation of Joints in Rigid Pavement prior to resealing.** Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the joint and does not damage the joint.

**101-3.8.1 Removal of Existing Joint Sealant**. All existing joint sealants will be removed by plowing or use of hand tools. Any remaining sealant and or debris will be removed by use of wire brushes or other tools as necessary. Resaw joints removing no more than 1/16 inch (2 mm) from each joint face. Immediately after sawing, flush out joint with water and other tools as necessary to completely remove the slurry.

**101-3.8.2 Cleaning prior to sealing**. Immediately before sealing, joints shall be cleaned by removing any remaining laitance and other foreign material. Allow sufficient time to dry out joints prior to sealing. Joint surfaces will be surface-dry prior to installation of sealant.

**101-3.8.3 Joint sealant.** Joint material and installation will be in accordance with plan notes.

**101-3.9 Preparation of Cracks in Flexible Pavement prior to sealing.** Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the cracks and does not damage the pavement.

**101-3.9.1 Preparation of Crack**. Widen crack with router by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.

**101-3.9.2 Removal of Existing Crack Sealant**. Existing sealants will be removed by routing. Following routing, any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.

101-3.9.3 Crack Sealant. Crack sealant material and installation will be in accordance with Item P-605.

#### 101-3.9.4 Removal of Pipe and other Buried Structures.

**a. Removal of Existing Pipe Material.** Remove the types of pipe as indicated on the plans. The pipe material shall be legally disposed of off-site in a timely manner following removal. Trenches shall be backfilled with material equal to or better in quality than adjacent embankment. Trenches under paved areas must be compacted to 95% of ASTM D1557.

**b. Removal of Inlets/Manholes.** Where indicated on the plans or as directed by the RPR, inlets and/or manholes shall be removed and legally disposed of off-site in a timely fashion after removal. Excavations after removal shall be backfilled with material equal or better in quality than adjacent embankment. When under paved areas must be compacted to 95% of ASTM D1557, when outside of paved areas must be compacted to 95% of ASTM D698.

#### METHOD OF MEASUREMENT

**101-4.1 Lump sum**. No separate measurement for payment will be made. The work covered by this section shall be considered as a subsidiary obligation of the Contractor and covered under the other contract items.

**101-4.1 Pavement removal**. The unit of measurement for pavement removal shall be square yard removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall be repaired and not be included in the measurement for payment. No direct measurement or payment shall be made for saw cutting. Saw cutting shall be incidental to pavement removal. Dowel bar installation shall be incidental to pavement removal.

**101-4.2 Joint and crack repair**. The unit of measurement for joint and crack repair shall be the linear foot (meter) of joint.

**101-4.3 Removal of Foreign Substances/contaminates**. The unit of measurement for foreign Substances/contaminates removal shall be the square foot (meter).

**101-4.4 Spalled and failed asphalt pavement repair.** The unit of measure for failed asphalt pavement repair shall be square foot (square meter).

**101-4.5 Concrete Spall Repair.** The unit of measure for concrete spall repair shall be the number of square feet (square meter). The location and average depth of the patch shall be determined and agreed upon by the RPR and the Contractor.

**101-4.6 Cold milling.** The unit of measure for cold milling shall be inches of milling per square yard (square meter). The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling.

**101-4.7 Miscellaneous Demolition.** The unit of measurement for removal of various debris, sidewalk, etc. will be lump sum.

**101-4.8 Removal of Pipe and other Buried Structures.** The unit of measurement for removal of pipe and other buried structures will be lump sum. No separate measurement for payment will be made. The work covered by this section shall be considered as a subsidiary obligation of the Contractor and covered under the other contract items.

#### **BASIS OF PAYMENT**

**101-5.1 Payment.** Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P 101-5.1	Pavement Demolition (Concrete or Asphalt) - per lump sum
Item P 101-5.2	Miscellaneous Demolition – per lump sum
Item P 101-5.3	Drainage Demolition – per lump sum

#### REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)	
AC 150/5380-6	Guidelines and Procedures for Maintenance of Airport Pavements.
ASTM International (ASTM)	
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

#### **END OF ITEM P-101**

#### **ITEM P-151 CLEARING & GRUBBING**

#### DESCRIPTION

**151-1.1** This item shall consist of clearing or clearing and grubbing, including the disposal of materials, for all areas within the limits designated on the plans or as required by the Resident Project Representative (RPR).

**a.** Clearing shall consist of the cutting and removal of all trees, stumps, brush, logs, hedges, the removal of fences and other loose or projecting material from the designated areas. The grubbing of stumps and roots will not be required.

**b.** Clearing and grubbing shall consist of clearing the surface of the ground of the designated areas of all trees, stumps, down timber, logs, snags, brush, undergrowth, hedges, heavy growth of grass or weeds, fences, structures, debris, and rubbish of any nature, natural obstructions or such material which in the opinion of the RPR is unsuitable for the foundation of strips, pavements, or other required structures, including the grubbing of stumps, roots, matted roots, foundations, and the disposal from the project of all spoil materials resulting from clearing and grubbing.

**c. Tree Removal.** Tree Removal shall consist of the cutting and removal of isolated single trees or isolated groups of trees, and the grubbing of stumps and roots. The removal of all the trees of this classification shall be in accordance with the requirements for the particular area being cleared.

#### **CONSTRUCTION METHODS**

**151-2.1 General.** The areas denoted on the plans to be cleared and grubbed shall be staked on the ground by the Contractor as indicated on the plans.

The removal of existing structures and utilities required to permit orderly progress of work shall be accomplished by local agencies, unless otherwise shown on the plans. Whenever a telephone pole, pipeline, conduit, sewer, roadway, or other utility is encountered and must be removed or relocated, the Contractor shall advise the RPR who will notify the proper local authority or owner to secure prompt action.

**151-2.1.1 Disposal.** All materials removed by clearing or by clearing and grubbing shall be disposed of-outside the Airport's limits at the Contractor's responsibility, except when otherwise directed by the RPR. As far as practicable, waste concrete and masonry shall be placed on slopes of embankments or channels. When embankments are constructed of such material, this material shall be placed in accordance with requirements for formation of embankments. Any broken concrete or masonry that cannot be used in construction and all other materials not considered suitable for use elsewhere, shall be disposed of by the Contractor. In no case, shall any discarded materials be left in windrows or piles adjacent to or within the airport limits. The manner and location of disposal of materials shall be subject to the approval of the RPR and shall not create an unsightly or objectionable view. When the Contractor is required to locate a disposal area outside the airport property limits, the Contractor shall obtain and file with the RPR permission in writing from the property owner for the use of private property for this purpose.

**151-2.1.2 Blasting.** Blasting shall not be allowed.

**151-2.2 Clearing.** The Contractor shall clear the staked or indicated area of all materials as indicated on the plans. Trees unavoidably falling outside the specified clearing limits must be cut up, removed, and disposed of in a satisfactory manner. To minimize damage to trees that are to be left standing, trees shall be felled toward the center of the area being cleared. The Contractor shall preserve and protect from injury all trees not to be removed. The trees, stumps, and brush shall be cut flush with the original ground surface. The grubbing of stumps and roots will not be required.

Fences shall be removed and disposed of as directed by the RPR. Fence wire shall be neatly rolled and the wire and posts stored on the airport if they are to be used again, or stored at a location designated by the RPR if the fence is to remain the property of a local owner or authority.

**151-2.3 Clearing and grubbing.** In areas designated to be cleared and grubbed, all stumps, roots, buried logs, brush, grass, and other unsatisfactory materials as indicated on the plans, shall be removed, except where embankments exceeding 3-1/2 feet (105 cm) in depth will be constructed outside of paved areas. For embankments constructed outside of paved areas, all unsatisfactory materials shall be removed, but sound trees, stumps, and brush can be cut off flush with the original ground and allowed to remain. Tap roots and other projections over 1-1/2 inches (38 mm) in diameter shall be grubbed out to a depth of at least 18 inches (0.5 m) below the finished subgrade or slope elevation.

Any buildings and miscellaneous structures that are shown on the plans to be removed shall be demolished or removed, and all materials shall be disposed of by removal from the site. The cost of removal is incidental to this item. The remaining or existing foundations, wells, cesspools, and like structures shall be destroyed by breaking down the materials of which the foundations, wells, cesspools, etc., are built to a depth at least 2 feet (60 cm) below the existing surrounding ground. Any broken concrete, blocks, or other objectionable material that cannot be used in backfill shall be removed and disposed of at the Contractor's expense. The holes or openings shall be backfilled with acceptable material and properly compacted.

All holes in embankment areas remaining after the grubbing operation shall have the sides of the holes flattened to facilitate filling with acceptable material and compacting as required in Item P-152. The same procedure shall be applied to all holes remaining after grubbing in areas where the depth of holes exceeds the depth of the proposed excavation.

#### METHOD OF MEASUREMENT

151-3.1 NOT USED.

**151-3.2** The quantities of clearing and grubbing as shown by the limits on the plans shall be the number of acres-of land specifically cleared and grubbed.

**151-3.3** The quantity of tree removal as shown on the plans shall be the number of acres (square meters) or fractions thereof of land specifically cleared.

#### **BASIS OF PAYMENT**

151-4.1 NOT USED.

**151-4.2** Payment shall be made at the contract unit price per acre for clearing and grubbing. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

**151-4.3** Payment shall be made at the contract unit price per acre (square meter) for tree removal. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-151-4.1	Light Clearing and Grubbing (for Individual Tress) – per acre
Item P-151-4.2	Heavy Clearing and grubbing – per acre

## END OF ITEM P-151

#### **ITEM P-152 EXCAVATION, SUBGRADE & EMBANKMENT**

### DESCRIPTION

**152-1.1** This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

152-1.2 All suitable material taken from excavation areas located on site shall be used in the formation of embankment, subgrade, and for back filling in areas as indicated on the project plans or as directed by the Engineer. No suitable material shall be removed from the site without the written approval of the Engineer.

152.1.3 All unsuitable material including debris, pavement rubble, concrete slabs, rock, or other debris or such material which in the opinion of the Engineer is unsuitable for embankment will be removed from the airport limits and disposed of at a location provided by the Contractor. He shall obtain and file with the Engineer permission in writing from the property owner for the use of private property for this purpose and the necessary permits from the municipality regulating the disposal area.

**152-1.2 Classification.** All material excavated shall be classified as defined below:

**a.** Unclassified excavation. Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature which is not otherwise classified and paid for under one of the following items.

**152-1.3 Unsuitable excavation.** Any material containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material, suitable for topsoil may be used on the embankment slope when approved by the Engineer.

#### **CONSTRUCTION METHODS**

**152-2.1 General.** Before beginning excavation, grading, and embankment operations in any area, the area shall be completely cleared and grubbed in accordance with Item P-151.

The suitability of material to be placed in embankments shall be subject to approval by the Engineer. All unsuitable material shall be disposed of in waste areas shown on the plans. All waste areas shall be graded to allow positive drainage of the area and of adjacent areas. The surface elevation of waste areas shall not extend above the surface elevation of adjacent usable areas of the airport, unless specified on the plans or approved by the Engineer.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued, and the Engineer notified per subsection 70-20. At the direction of the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Those areas outside of the limits of the pavement areas where the top layer of soil material has become compacted by hauling or other Contractor activities shall be scarified and disked to a depth of 4 inches (100 mm), to loosen and pulverize the soil.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures, the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the Contractor shall notify the Engineer, who shall arrange for their removal if necessary. The Contractor, at his or her expense, shall satisfactorily repair or pay the cost of all damage to such facilities or structures that may result from any of the Contractor's operations during the period of the contract.

**152-2.2 Excavation.** No excavation shall be started until the work has been staked out by the Contractor and the Engineer has obtained from the Contractor, the survey notes of the elevations and measurements of the ground surface. All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future use in areas designated on the plans or by the Engineer. All suitable excavated material shall be used in the formation of embankment, subgrade, or other purposes shown on the plans. All unsuitable material shall be disposed of *off-site at the contractor's expense* as shown on the plans.

When the volume of the excavation exceeds that required to construct the embankments to the grades indicated, the excess shall be used to grade the areas of ultimate development or disposed as directed by the Engineer. When the volume of excavation is not sufficient for constructing the embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

The grade shall be maintained so that the surface is well drained at all times. When necessary, temporary drains and drainage ditches shall be installed to intercept or divert surface water that may affect the work.

**a. Selective grading.** When selective grading is indicated on the plans, the more suitable material designated by the Engineer shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas so that it can be measured for payment as specified in paragraph 152-3.3.

**b.** Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for safety areas, subgrades, roads, shoulders, or any areas intended for turf shall be excavated to a minimum depth of 12 inches below the subgrade or to the depth specified by the Engineer. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be disposed off the airport. The cost is incidental to this item. This excavated material shall be paid for at the contract unit price per cubic yard for *Excavation and Embankment*. The excavated area shall be backfilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary backfill will constitute a part of the embankment. Where rock cuts are made, backfill with select material. Any pockets created in the rock surface shall be drained in accordance with the details shown on the plans.

**c.** Overbreak. Overbreak, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the Engineer. All overbreak shall be graded or removed by the Contractor and disposed of as directed by the Engineer. The Engineer shall determine if the displacement of such material was unavoidable and his or her decision shall be final. Payment will not be made for the removal and disposal of overbreak that the Engineer determines as avoidable. Unavoidable overbreak will be classified as "Unclassified Excavation."

**d. Removal of utilities.** The removal of existing structures and utilities required to permit the orderly progress of work will be accomplished by someone other than the Contractor; for example, the utility unless otherwise shown on the plans. All existing foundations shall be excavated at least 2 feet (60 cm) below the top of subgrade or as indicated on the plans, and the material disposed of as directed by the Engineer. All foundations thus excavated shall be backfilled with suitable material and compacted as specified.

e. Compaction requirements. The subgrade under areas to be paved shall be compacted to a depth of 24' *below base material in 12" lifts* and to a density of not less than 100 percent of the maximum density as determined by ASTM D1557. The material to be compacted shall be within  $\pm 2\%$  of optimum moisture content before being rolled to obtain the prescribed compaction (except for expansive soils).

The in-place field density shall be determined in accordance with **ASTM** D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not be permitted in the top 6 inches (150 mm) of the subgrade. The finished grading operations, conforming to the typical cross-section, shall be completed and maintained at least 1,000 feet (300 m) ahead of the paving operations or as directed by the Engineer.

No additional payment will be made for suitable materials removed, manipulated, and replaced in order to obtain the required depth of density. This cost will be considered incidental to the Excavation and Embankment bid item.

All loose or protruding rocks on the back slopes of cuts shall be pried loose or otherwise removed to the slope finished grade line. All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the plans or as directed by the Engineer.

Blasting shall not be allowed.

**f. Proof rolling.** After compaction is completed, the subgrade area shall be proof rolled with a heavy pneumatic-tired roller having four or more tires abreast, each tire loaded to a minimum of 30,000 pounds (13.6 metric tons) and inflated to a minimum of 125 psi (0.861 MPa) in the presence of the Engineer. Apply a minimum of 75% coverage, or as specified by the Engineer, to all paved areas. A coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that deflect more than 1 inch (25 mm) or show permanent deformation greater than 1 inch (25 mm) shall be removed and replaced with suitable material or reworked to conform to the moisture content and compaction requirements in accordance with these specifications.

**152-2.3 Borrow excavation.** Borrow areas within the airport property are indicated on the plans. Borrow excavation shall be made only at these designated locations and within the horizontal and vertical limits as staked or as directed by the Engineer.

When borrow sources are outside the boundaries of the airport property, it shall be the Contractor's responsibility to locate and obtain the borrow sources, subject to the approval of the Engineer. The Contractor shall notify the Engineer at least 15 days prior to beginning the excavation so necessary measurements and tests can be made. All borrow pits shall be opened up to expose the various strata of acceptable material to allow obtaining a uniform product. All unsuitable material shall be disposed of by the Contractor. Borrow pits shall be excavated to regular lines to permit accurate measurements, and they shall be drained and left in a neat, presentable condition with all slopes dressed uniformly.

#### 152-2.4 Drainage excavation. NOT USED.

**152-2.5 Preparation of embankment area.** Where an embankment is to be constructed to a height of 4 feet (1.2 m) or less, all sod and vegetative matter shall be removed from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by plowing or scarifying to a minimum depth of 6 inches (150 mm) and shall then be compacted as indicated in paragraph 152-2.6. When the height of fill is greater than 4 feet (1.2 m), sod not required to be removed shall be thoroughly disked and recompacted to the density of the surrounding ground before construction of embankment.

Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches (300 mm) and compacted as specified for the adjacent fill.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

**152-2.6 Formation of embankments.** Embankments shall be formed in successive horizontal layers of not more than 8 inches (200 mm) in loose depth for the full width of the cross-section, unless otherwise approved by the Engineer.

The layers shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the Engineer. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to provide surface drainage at all times.

The material in each layer shall be within  $\pm 2\%$  of optimum moisture content before rolling to obtain the prescribed compaction. To achieve a uniform moisture content throughout the layer, the material shall be moistened or aerated as necessary. Samples of all embankment materials for testing, both before and after placement and compaction, will be taken for each 1,000 square yards. Based on these tests, the Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content to achieve the specified embankment density.

Rolling operations shall be continued until the embankment is compacted to not less than 95% of maximum density for noncohesive soils, and 90% of maximum density for cohesive soils as determined by ASTM D1557. Under all areas to be paved, the embankments shall be compacted to a depth of 24" in 12" lifts and to a density of not less than 100 percent of the maximum density as determined by ASTM D1557.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches (100 mm).

The in-place field density shall be determined in accordance with ASTM 6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. The Contractor's laboratory shall perform all density tests in the Engineer's presence and provide the test results upon completion to the Engineer for acceptance. Compaction areas shall be kept separate, and no layer shall be covered by another layer until the proper density is obtained.

During construction of the embankment, the Contractor shall route all construction equipment evenly over the entire width of the embankment as each layer is placed. Layer placement shall begin in the deepest portion of the embankment fill. As placement progresses, the layers shall be constructed approximately parallel to the finished pavement grade line.

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the embankment and the other material shall be incorporated under the future paved areas. Stones or fragmentary rock larger than 4 inches (100 mm) in their greatest dimensions will not be allowed in the top 6 inches (150 mm) of the subgrade. Rockfill shall be brought up in layers as specified or as directed by the Engineer and the finer material shall be used to fill the voids with forming a dense, compact mass. Rock or boulders shall not be disposed of outside the excavation or embankment areas, except at places and in the manner designated on the plans or by the Engineer.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in layers of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in layers not exceeding 2 feet (60 cm) in thickness. Each layer shall be leveled and smoothed with suitable equipment by distribution of spalls and finer fragments of rock. The layer shall not be constructed above an elevation 4 feet (1.2 m) below the finished subgrade.

There will be no separate measurement of payment for compacted embankment. All costs incidental to placing in layers, compacting, discing, watering, mixing, sloping, and other operations necessary for construction of embankments will be included in the contract price for excavation, borrow, or other items.

**152-2.7 Finishing and protection of subgrade.** After the subgrade is substantially complete, the Contractor shall remove any soft or other unstable material over the full width of the subgrade that will not compact properly. All low areas, holes or depressions in the subgrade shall be brought to grade with suitable select material. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans.

Grading of the subgrade shall be performed so that it will drain readily. The Contractor shall protect the subgrade from damage and limit hauling over the finished subgrade to only traffic essential for construction purposes. All ruts or rough places that develop in the completed subgrade shall be graded and recompacted.

No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been approved by the Engineer.

**152-2.8 Haul.** All hauling will be considered a necessary and incidental part of the work. The Contractor shall include the cost in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

**152-2.9 Tolerances.** In those areas upon which a subbase or base course is to be placed, the top of the subgrade shall be of such smoothness that, when tested with a 12-foot (3.7-m) straightedge applied parallel and at right angles to the centerline, it shall not show any deviation in excess of 1/2 inch (12 mm), or shall not be more than 0.05 feet (15 mm) from true grade as established by grade hubs. Any deviation in excess of these amounts shall be corrected by loosening, adding, or removing materials; reshaping; and recompacting.

On safety areas, intermediate and other designated areas, the surface shall be of such smoothness that it will not vary more than 0.10 feet (3 mm) from true grade as established by grade hubs. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

**152-2.10 Topsoil.** When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of finished construction, the material shall be stockpiled at approved locations. Stockpiles shall not be placed within 260 feet of runway pavement or 70 feet of taxiway pavement and shall not be placed on areas that subsequently will require any excavation or embankment fill. If, in the judgment of the Engineer, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further rehandling. Upon completion of grading operations, stockpiled topsoil shall be handled and placed as directed, or as required in Item T-905.

No direct payment will be made for topsoil under Item P-152.

#### METHOD OF MEASUREMENT

**152-3.1** The quantity of Excavation and Embankment to be paid for shall be the number of cubic yards measured in its original position. Measurement shall not include the quantity of materials excavated without authorization beyond normal slope lines, or the quantity of material used for purposes other than those directed.

#### **BASIS OF PAYMENT**

**152-4.1** "Excavation and Embankment" payment shall be made at the contract unit price per cubic yard (cubic meter). This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-152-4.1

Excavation and Embankment - per cubic yard

# **TESTING REQUIREMENTS**

ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft <sup>3</sup> (600 kN-m/m <sup>3</sup> ))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft <sup>3</sup> (2700 kN-m/m <sup>3</sup> ))
ASTM D2167	Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method
ASTM D6938	Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

# END OF ITEM P-152

## ITEM P-610 CONCRETE FOR MISCELLANEOUS STRUCTURES

#### DESCRIPTION

**610-1.1** This item shall consist of concrete and reinforcement, as shown on the plans, prepared and constructed in accordance with these specifications. This specification shall be used for all concrete other than airfield pavement which are cast-in-place.

#### MATERIALS

**610-2.1 General.** Only approved materials, conforming to the requirements of these specifications, shall be used in the work. Materials may be subject to inspection and tests at any time during their preparation or use. The source of all materials shall be approved by the Resident Project Representative (RPR) before delivery or use in the work. Representative preliminary samples of the materials shall be submitted by the Contractor, when required, for examination and test. Materials shall be stored and handled to ensure preservation of their quality and fitness for use and shall be located to facilitate prompt inspection. All equipment for handling and transporting materials and concrete must be clean before any material or concrete is placed in them.

The use of pit-run aggregates shall not be permitted unless the pit-run aggregate has been screened and washed, and all fine and coarse aggregates stored separately and kept clean. The mixing of different aggregates from different sources in one storage stockpile or alternating batches of different aggregates shall not be permitted.

**a. Reactivity.** Fine aggregate and coarse aggregates to be used in all concrete shall have been tested separately within six months of the project in accordance with ASTM C1260. Test results shall be submitted to the RPR. The aggregate shall be considered innocuous if the expansion of test specimens, tested in accordance with ASTM C1260, does not exceed 0.08% at 14 days (16 days from casting). If the expansion either or both test specimen is greater than 0.08% at 14 days, but less than 0.20%, a minimum of 25% of Type F fly ash, or between 40% and 55% of slag cement shall be used in the concrete mix.

If the expansion is greater than 0.20% the aggregates shall not be used, and test results for other aggregates must be submitted for evaluation.

**610-2.2 Coarse aggregate.** The coarse aggregate for concrete shall meet the requirements of ASTM C33 and the requirements of Table 4, Class Designation 5S; and the grading requirements shown below, as required for the project.

Maximum Aggregate Size	ASTM C33, Table 3 Grading Requirements (Size No.)
1 1/2 inch (37.5 mm)	467 or 4 and 67
1 inch (25 mm)	57
<sup>3</sup> / <sub>4</sub> inch (19 mm)	67
<sup>1</sup> / <sub>2</sub> inch (12.5 mm)	7

<i>Coarse Aggregate</i>	Grading	Requirements
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610-2.2.1 Coarse Aggregate susceptibility to durability (D) cracking. NOT USED.

610-2.3 Fine aggregate. The fine aggregate for concrete shall meet all fine aggregate requirements of ASTM C33.

610-2.4 Cement. Cement shall conform to the requirements of ASTM C150, Type I or II

#### 610-2.5 Cementitious materials.

**a. Fly ash.** Fly ash shall meet the requirements of ASTM C618, with the exception of loss of ignition, where the maximum shall be less than 6%. Fly ash shall have a Calcium Oxide (CaO) content of less than 13% and a total available alkali content less than 3% per ASTM C311. Fly ash produced in furnace operations using liming materials or soda ash (sodium carbonate) as an additive shall not be acceptable. The Contractor shall furnish the previous three most recent, consecutive ASTM C618 reports for each source of fly ash proposed in the concrete mix, and shall furnish each additional report as they become available during the project. The reports can be used for acceptance or the material may be tested independently by the RPR.

**b.** Slag cement (ground granulated blast furnace (GGBF)). Slag cement shall conform to ASTM C989, Grade 100 or Grade 120. Slag cement shall be used only at a rate between 25% and 55% of the total cementitious material by mass.

**610-2.6 Water.** Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

**610-2.7 Admixtures.** The Contractor shall submit certificates indicating that the material to be furnished meets all of the requirements indicated below. In addition, the RPR may require the Contractor to submit complete test data from an approved laboratory showing that the material to be furnished meets all of the requirements of the cited specifications. Subsequent tests may be made of samples taken by the RPR from the supply of the material being furnished or proposed for use on the work to determine whether the admixture is uniform in quality with that approved.

**a.** Air-entraining admixtures. Air-entraining admixtures shall meet the requirements of ASTM C260 and shall consistently entrain the air content in the specified ranges under field conditions. The air-entrainment agent and any water reducer admixture shall be compatible.

**b. Water-reducing admixtures**. Water-reducing admixture shall meet the requirements of ASTM C494, Type A, B, or D. ASTM C494, Type F and G high range water reducing admixtures and ASTM C1017 flowable admixtures shall not be used.

**c. Other chemical admixtures**. The use of set retarding, and set-accelerating admixtures shall be approved by the RPR. Retarding shall meet the requirements of ASTM C494, Type A, B, or D and set-accelerating shall meet the requirements of ASTM C494, Type C. Calcium chloride and admixtures containing calcium chloride shall not be used.

**610-2.8 Pre-molded joint material.** Pre-molded joint material for expansion joints shall meet the requirements of ASTM **ASTM D1751.** 

610-2.9 Joint filler. The filler for joints shall meet the requirements of Item P-605, unless otherwise specified.

**610-2.10 Steel reinforcement.** Reinforcing shall consist of *welded steel wire fabric* conforming to the requirements of **ASTM A1064.** 

610-2.11 Materials for curing concrete. Curing materials shall conform to one of the following specifications:

#### Materials for Curing

Waterproof paper	ASTM C171
Clear or white Polyethylene Sheeting	ASTM C171
White-pigmented Liquid Membrane-Forming Compound, Type 2, Class B	ASTM C309

#### **CONSTRUCTION METHODS**

**610-3.1 General.** The Contractor shall furnish all labor, materials, and services necessary for, and incidental to, the completion of all work as shown on the drawings and specified here. All machinery and equipment used by the Contractor on the work, shall be of sufficient size to meet the requirements of the work. All work shall be subject to the inspection and approval of the RPR.

**610-3.2 Concrete Mixture.** The concrete shall develop a compressive strength of 4000 psi, *unless otherwise noted in the Project Drawings*, in 28 days as determined by test cylinders made in accordance with ASTM C31 and tested in accordance with ASTM C39. The concrete shall contain not less than 470 pounds of cementitious material per cubic yard (280 kg per cubic meter). The water cementitious ratio shall not exceed 0.45 by weight. The air content of the concrete shall be 5% +/- 1.2% as determined by ASTM C231 and shall have a slump of not more than 4 inches (100 mm) as determined by ASTM C143.

**610-3.3 Mixing.** Concrete may be mixed at the construction site, at a central point, or wholly or in part in truck mixers. The concrete shall be mixed and delivered in accordance with the requirements of ASTM C94 or ASTM C685.

The concrete shall be mixed only in quantities required for immediate use. Concrete shall not be mixed while the air temperature is below 40°F (4°C) without the RPRs approval. If approval is granted for mixing under such conditions, aggregates or water, or both, shall be heated and the concrete shall be placed at a temperature not less than 50°F (10°C) nor more than 100°F (38°C). The Contractor shall be held responsible for any defective work, resulting from freezing or injury in any manner during placing and curing, and shall replace such work at his expense.

Re-tempering of concrete by adding water or any other material is not permitted.

The rate of delivery of concrete to the job shall be sufficient to allow uninterrupted placement of the concrete.

**610-3.4 Forms**. Concrete shall not be placed until all the forms and reinforcements have been inspected and approved by the RPR. Forms shall be of suitable material and shall be of the type, size, shape, quality, and strength to build the structure as shown on the plans. The forms shall be true to line and grade and shall be mortar-tight and sufficiently rigid to prevent displacement and sagging between supports. The surfaces of forms shall be smooth and free from irregularities, dents, sags, and holes. The Contractor shall be responsible for their adequacy.

The internal form ties shall be arranged so no metal will show in the concrete surface or discolor the surface when exposed to weathering when the forms are removed. All forms shall be wetted with water or with a non-staining mineral oil, which shall be applied immediately before the concrete is placed. Forms shall be constructed so they can be removed without injuring the concrete or concrete surface.

**610-3.5 Placing reinforcement.** All reinforcement shall be accurately placed, as shown on the plans, and shall be firmly held in position during concrete placement. Bars shall be fastened together at intersections. The reinforcement shall be supported by approved metal chairs. Shop drawings, lists, and bending details shall be supplied by the Contractor when required.

**610-3.6 Embedded items.** Before placing concrete, all embedded items shall be firmly and securely fastened in place as indicated. All embedded items shall be clean and free from coating, rust, scale, oil, or any foreign matter. The concrete shall be spaded and consolidated around and against embedded items. The embedding of wood shall not be allowed.

**610-3.7 Concrete Consistency**. The Contractor shall monitor the consistency of the concrete delivered to the project site; collect each batch ticket; check temperature; and perform slump tests on each truck at the project site in accordance with ASTM C143.

**610-3.8 Placing concrete.** All concrete shall be placed during daylight hours, unless otherwise approved. The concrete shall not be placed until the depth and condition of foundations, the adequacy of forms and falsework, and the placing of the steel reinforcing have been approved by the RPR. Concrete shall be placed as soon as practical after mixing, but in no case later than one (1) hour after water has been added to the mix. The method and manner of placing shall avoid segregation and displacement of the reinforcement. Troughs, pipes, and chutes shall be used as an aid in placing concrete when necessary. The concrete shall not be dropped from a height of more than 5 feet (1.5 m). Concrete shall be deposited as nearly as practical in its final position to avoid segregation due to re-handling or flowing. Do not subject concrete to procedures which cause segregation. Concrete shall be placed on clean, damp surfaces, free from running water, or on a properly consolidated soil foundation.

**610-3.9 Vibration.** Vibration shall follow the guidelines in American Concrete Institute (ACI) Committee 309R, Guide for Consolidation of Concrete.

610-3.10 Joints. Joints shall be constructed as indicated on the plans.

**610-3.11 Finishing.** All exposed concrete surfaces shall be true, smooth, and free from open or rough areas, depressions, or projections. All concrete horizontal plane surfaces shall be brought flush to the proper elevation with the finished top surface struck-off with a straightedge and floated.

**610-3.12 Curing and protection.** All concrete shall be properly cured in accordance with the recommendations in American Concrete Institute (ACI) 308R, Guide to External Curing of Concrete. The concrete shall be protected from damage until project acceptance.

**610-3.13 Cold weather placing.** When concrete is placed at temperatures below 40°F (4°C), follow the cold weather concreting recommendations found in ACI 306R, Cold Weather Concreting.

**610-3.14 Hot weather placing.** When concrete is placed in hot weather greater than 85°F (30 °C), follow the hot weather concreting recommendations found in ACI 305R, Hot Weather Concreting.

#### QUALITY ASSURANCE (QA)

**610-4.1 Quality Assurance sampling and testing**. Concrete for each day's placement will be accepted on the basis of the compressive strength specified in paragraph 610-3.2. The RPR will sample the concrete in accordance with ASTM C172; test the slump in accordance with ASTM C143; make and cure compressive strength specimens in accordance with ASTM C31; and test in accordance with ASTM C39. The QA testing agency will meet the requirements of ASTM C1077.

The Contractor shall provide adequate facilities for the initial curing of cylinders.

**610-4.2 Defective work.** Any defective work that cannot be satisfactorily repaired as determined by the RPR, shall be removed and replaced at the Contractor's expense. Defective work includes, but is not limited to, uneven dimensions, honeycombing and other voids on the surface or edges of the concrete.

#### METHOD OF MEASUREMENT

**610-5.1** Concrete shall be considered incidental and no separate measurement shall be made.

#### **BASIS OF PAYMENT**

610-6.1 NOT USED.

#### REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM A184	Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement
ASTM A615	Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
ASTM A704	Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement
ASTM A706	Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement
ASTM A775	Standard Specification for Epoxy-Coated Steel Reinforcing Bars
ASTM A884	Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement
ASTM A934	Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars
ASTM A1064	Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete
ASTM C31	Standard Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C33	Standard Specification for Concrete Aggregates
ASTM C39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
ASTM C94	Standard Specification for Ready-Mixed Concrete
ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM C114	Standard Test Methods for Chemical Analysis of Hydraulic Cement
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C143	Standard Test Method for Slump of Hydraulic-Cement Concrete
ASTM C150	Standard Specification for Portland Cement
ASTM C171	Standard Specification for Sheet Materials for Curing Concrete
ASTM C172	Standard Practice for Sampling Freshly Mixed Concrete
ASTM C231	Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C260	Standard Specification for Air-Entraining Admixtures for Concrete
ASTM C309	Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C311	Standard Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete
ASTM C494	Standard Specification for Chemical Admixtures for Concrete
ASTM C618	Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete

ASTM C666	Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
ASTM C685	Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing
ASTM C989	Standard Specification for Slag Cement for Use in Concrete and Mortars
ASTM C1017	Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete
ASTM C1077	Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM C1157	Standard Performance Specification for Hydraulic Cement
ASTM C1260	Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C1365	Standard Test Method for Determination of the Proportion of Phases in Portland Cement and Portland-Cement Clinker Using X-Ray Powder Diffraction Analysis
ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM D1751	Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Asphalt Types)
ASTM D1752	Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction
American Concrete Institute (ACI)	
ACI 305R	Hot Weather Concreting
ACI 306R	Cold Weather Concreting

ACI 306R	Cold Weather Concreting
ACI 308R	Guide to External Curing of Concrete
ACI 309R	Guide for Consolidation of Concrete

# END OF ITEM P-610

#### **ITEM F-162 CHAIN-LINK FENCE**

#### DESCRIPTION

**162-1.1** This item shall consist of furnishing and erecting a chain-link fence in accordance with these specifications, the details shown on the plans, and in conformity with the lines and grades shown on the plans or established by the Engineer.

#### MATERIALS

**162-2.1 Fabric.** The fabric shall be woven with a 9-gauge galvanized steel in a 2-inch (50 mm) mesh and shall meet the requirements of ASTM A392, Class 2.

**162-2.2 Barbed wire.** Barbed wire shall be 2-strand 12-1/2-gauge zinc-coated wire with 4-point barbs and shall conform to the requirements of ASTM A121, Class 3, Chain Link Fence Grade.

**162-2.3 Posts, rails, and braces.** Line posts, rails, and braces shall conform to the requirements of ASTM F1043 or ASTM F1083 as follows:

- a. Galvanized tubular steel pipe shall conform to the requirements of Group IA, (Schedule 40) coatings conforming to Type A, or Group IC (High Strength Pipe), External coating Type B, and internal coating Type B or D.
- b. Roll Formed Steel Shapes (C-Sections) shall conform to the requirements of Group IIA, and be galvanized in accordance with the requirements of ASTM F1043, Type A.
- c. Hot-Rolled Shapes (H Beams) shall meet the requirements of Group III, and be galvanized in accordance with the requirements of ASTM F1043, Type A.
- d. Aluminum Pipe shall conform to the requirements of Group IB.
- e. Aluminum Shapes shall conform to the requirements of Group IIB.
- f. Vinyl or polyester coated steel shall conform to the requirements of ASTM F1043, Paragraph 7.3, Optional Supplemental Color Coating.
- g. Composite posts shall conform to the strength requirements of ASTM F1043 or ASTM F1083. The strength loss of composite posts shall not exceed 10% when subjected to 3,600 hours of exposure to light and water in accordance with ASTM G152, ASTM G153, ASTM G154, and ASTM G155.
- h. Posts, rails, and braces furnished for use in conjunction with aluminum alloy fabric shall be aluminum alloy or composite.
- i. Posts, rails, and braces, with the exception of galvanized steel conforming to ASTM F1043 or ASTM F1083, Group 1A, Type A, or aluminum alloy, shall demonstrate the ability to withstand testing in salt spray in accordance with ASTM B117 as follows:
  - External: 1,000 hours with a maximum of 5% red rust.
  - Internal: 650 hours with a maximum of 5% red rust.

The dimensions of the posts, rails, and braces shall be in accordance with Tables I through VI of Federal Specification RR-F-191/3.

**162-2.4 Gates.** Gate frames shall consist of galvanized steel pipe and shall conform to the specifications for the same material under paragraph 162-2.3. The fabric shall be of the same type material as used in the fence.

**162-2.5** Wire ties and tension wires. Wire ties for use in conjunction with a given type of fabric shall be of the same material and coating weight identified with the fabric type. *Wire ties shall be 9-gauge steel or aluminum alloycore wire.* Tension wire shall be 7-gauge marcelled steel wire with the same coating as the fabric type and shall conform to ASTM A824.

All material shall conform to Federal Specification RR-F-191/4.

**162-2.6 Miscellaneous fittings and hardware.** Miscellaneous steel fittings and hardware for use with zinccoated steel fabric shall be of commercial grade steel or better quality, wrought or cast as appropriate to the article, and sufficient in strength to provide a balanced design when used in conjunction with fabric posts, and wires of the quality specified herein. All steel fittings and hardware shall be protected with a zinc coating applied in conformance with ASTM A153. Barbed wire support arms shall withstand a load of 250 pounds (113 kg) applied vertically to the outermost end of the arm.

**162-2.7 Concrete.** Concrete shall be of a commercial grade with a minimum 28-day compressive strength of <del>2500</del> *3,000* psi. *"Bag Mix" concrete is not allowed.* 

**162-2.8 Marking.** Each roll of fabric shall carry a tag showing the kind of base metal (steel, aluminum, or aluminum alloy number), kind of coating, the gauge of the wire, the length of fencing in the roll, and the name of the manufacturer. Posts, wire, and other fittings shall be identified as to manufacturer, kind of base metal (steel, aluminum, or aluminum alloy number), and kind of coating.

#### **CONSTRUCTION METHODS**

**162-3.1 Clearing fence line.** All trees, brush, stumps, logs, and other debris which would interfere with the proper construction of the fence in the required location shall be removed a minimum width of 5 feet (1.5 m), *unless otherwise noted on the plans*, on each side of the fence centerline before starting fencing operations. The cost of removing and disposing of the material *shall be as described in P-151*, *Heavy Clearing and Grubbing*.

**162-3.2 Installing posts.** All posts shall be set in concrete at the required dimension and depth and at the spacing shown on the plans.

The concrete shall be thoroughly compacted around the posts by tamping or vibrating and shall have a smooth finish slightly higher than the ground and sloped to drain away from the posts. All posts shall be set plumb and to the required grade and alignment. No materials shall be installed on the posts, nor shall the posts be disturbed in any manner within seven (7) days after the individual post footing is completed.

Should rock be encountered at a depth less than the planned footing depth, a hole 2 inches (50 mm) larger than the greatest dimension of the posts shall be drilled to a depth of 12 inches (300 mm). After the posts are set, the remainder of the drilled hole shall be filled with grout, composed of one-part Portland cement and two parts mortar sand. Any remaining space above the rock shall be filled with concrete in the manner described above.

In lieu of drilling, the rock may be excavated to the required footing depth. No extra compensation shall be made for rock excavation.

**162-3.3 Installing top rails.** The top rail shall be continuous and shall pass through the post tops. The coupling used to join the top rail lengths shall allow for expansion.

**162-3.4 Installing braces.** Horizontal brace rails, with diagonal truss rods and turnbuckles, shall be installed at all terminal posts.

**162-3.5 Installing fabric.** The wire fabric shall be firmly attached to the posts and braced as shown on the plans. All wire shall be stretched taut and shall be installed to the required elevations. The fence shall generally follow the contour of the ground, with the bottom of the fence fabric no less than one inch (25 mm) or more than 4 inches (100 mm) from the ground surface. Grading shall be performed where necessary to provide a neat appearance.

At locations of small natural swales or drainage ditches longer posts may be used, and multiple strands of barbed wire stretched to span the *swale*. *The fabric shall be installed so that the vertical clearance between the fabric and the natural ground is 4 inches or less.* The vertical clearance between strands of barbed wire shall be *4 inches* or less. *Cost for this work shall be considered incidental to gate and fence construction.* 

**162-3.6 Electrical grounds.** Electrical grounds shall be constructed *where a power line passes over the fence and at 400 feet (150 m) intervals. The ground shall be installed directly below the point of crossing.* The ground shall be accomplished with a copper clad rod 10 feet (2.4 m) long and a minimum of 3/4 inches (16 mm) in diameter driven vertically until the top is 6 inches (150 mm) below the ground surface. A No. 6 solid copper conductor shall be clamped to the rod and to the fence in such a manner that each element of the fence is grounded. Installation of ground rods shall not constitute a pay item and shall be considered incidental to fence construction. The Contractor shall comply with FAA-STD-019, Lightning and Surge Protection, Grounding, Bonding and Shielding Requirements for Facilities and Electronic Equipment, Paragraph 4.2.3.8, Lightning Protection for Fences and Gates, when fencing is adjacent to FAA facilities.

**162-3.7 Cleaning up.** The Contractor shall remove from the vicinity of the completed work all tools, buildings, equipment, etc., used during construction. All disturbed areas shall be sodded per T-904.

162-3.8 FENCE SIGNAGE. As shown on the project drawings, signs of the size and type shown on the plans will be required at all gates and fence.

#### METHOD OF MEASUREMENT

**162-4.1** Chain-link fence will be measured for payment by the linear foot (meter). Measurement will be along the top of the fence from center to center of end posts, excluding the length occupied by gate openings.

**162-4.2** Gates will be measured as complete units.

#### **BASIS OF PAYMENT**

The price shall be full compensation for furnishing all materials, and for all preparation, erection, and installation of these materials, and for all labor equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item F-162-5.1	8' Type E Galvanized Chain Link Fence with Galvanized Posts, No. 7 Gauge Top and Bottom Tension Wire, and 3 Strands of Galvanized Barbed Wire on Type I Extension Arms, Installed in Turf or Pavement- per linear foot
Item F-162-5.2	6' Type E Galvanized Chain Link Fence with Galvanized Posts, No. 7 Gauge Top and Bottom Tension Wire, and 3 Strands of Galvanized Barbed Wire on Type I Extension Arms, Installed in Turf or Pavement - per linear foot
Item F-162-5.3	Removal of Existing Chain Link Fence with Barbed Wire - per linear foot
Item F-162-5.4	Temporary Chain-Link Fence, 6' High with 3 Strands Barbed Wire, Installation and Removal – per linear foot
Item F-162-5.5	Re-Install A.O.A. 6' High with 3 Strands Barbed Wire 16' Swing Gate @ Bob Harmon Road and Corporate Road – per each
Item F-162-5.6	G.A.N.G. 8' Type E Galvanized Chain Link Fence with Galvanized Posts, No. 7 Gauge Top and Bottom Tension Wire, and 3 Strands of Galvanized Barbed Wire on Type 1 Extension Arms, Installed in Turf or Pavement – with Deadman Anchors and Cable Reinforcement – per linear foot
Item F-162-5.7	G.A.N.G. New 16' Swing Gate, Double Leaf, with Deadman Anchors and Cable Reinforcement – per each

# MATERIAL REQUIREMENTS

ASTM A121	Standard Specification for Metallic-Coated Carbon Steel Barbed Wire	
ASTM A123	Standard Specification for Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products	
ASTM A153	Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware	
ASTM A392	Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric	
ASTM A491	Standard Specification for Aluminum-Coated Steel Chain-Link Fence Fabric	
ASTM A572	Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel	
ASTM A653	Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process	
ASTM A824	Standard Specification for Metallic-Coated Steel Marcelled Tension Wire for Use with Chain Link Fence	
ASTM A1011	Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High Strength Low Alloy with Improved Formability, and Ultra High Strength	
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Apparatus	
ASTM B221	Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire, Profiles and Tubes	
ASTM B429	Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube	
ASTM F668	Standard Specification for Polyvinyl Chloride(PVC), Polyolefin and other Organic Polymer Coated Steel Chain-Link Fence Fabric	
ASTM F1043	Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework	
ASTM F1083	Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures	
ASTM F1183	Standard Specification for Aluminum Alloy Chain Link Fence Fabric	
ASTM F1345	Standard Specification for Zinc 5% Aluminum-Mischmetal Alloy Coated Steel Chain-Link Fence Fabric	
ASTM G152	Standard Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials	
ASTM G153	Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials	
ASTM G154	Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials	
ASTM G155	Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials	
FED SPEC RR-F-191/3	Fencing, Wire and Post, Metal (Chain-Link Fence Posts, Top Rails and Braces)	
FED SPEC RR-F-191/4	Fencing, Wire and Post, Metal (Chain-Link Fence Accessories)	

FAA-STD-019 Lightning and Surge Protection, Grounding, Bonding and Shielding Requirements for Facilities and Electronic Equipment

# END OF ITEM F-162

#### **ITEM T-901 SEEDING**

#### DESCRIPTION

**901-1.1** This item shall consist of soil preparation, seeding, liming, and fertilizing the areas shown on the plans or as directed by the Engineer in accordance with these specifications.

#### MATERIALS

**901-2.1 Seed.** The species and application rates of grass, legume, and cover-crop seed furnished shall be those stipulated herein. Seed shall conform to the requirements of Federal Specification JJJ-S-181, Federal Specification, Seeds, Agricultural.

Seed shall be furnished separately or in mixtures in standard containers labeled in conformance with the Agricultural Marketing Service (AMS) Seed Act and applicable state seed laws with the seed name, lot number, net weight, percentages of purity and of germination and hard seed, and percentage of maximum weed seed content clearly marked for each kind of seed. The Contractor shall furnish the Engineer duplicate signed copies of a statement by the vendor certifying that each lot of seed has been tested by a recognized laboratory for seed testing within six (6) months of date of delivery. This statement shall include: name and address of laboratory, date of test, lot number for each kind of seed, and the results of tests as to name, percentages of purity and of germination, and percentage of weed content for each kind of seed furnished, and, in case of a mixture, the proportions of each kind of seed. Wet, moldy, or otherwise damaged seed will be rejected.

Seeds shall be applied as follows:

Seed	Minimum Seed Purity (Percent)	Minimum Germination (Percent)	Rate of Application lb./acre (or lb./1,000 S.F.)
Bahia	95	80	120 lbs/acre (or 2.755 lbs/1,000 sf)
Bermuda	95	85	30 lbs/acre (or 0.6888 lbs/1,000 sf)

Seeding shall be performed *year round*, unless otherwise approved by the Engineer.

**901-2.2 Lime.** Lime shall be ground limestone containing not less than 85% of total carbonates and shall be ground to such fineness that 90% will pass through a No. 20 mesh sieve and 50% will pass through a No. 100 mesh sieve. Coarser material will be acceptable, providing the rates of application are increased to provide not less than the minimum quantities and depth specified in the special provisions on the basis of the two sieve requirements above. Dolomitic lime or a high magnesium lime shall contain at least 10% of magnesium oxide. Lime shall be applied at the rate of 3,000 lbs. per acre. All liming materials shall conform to the requirements of ASTM C602.

**901-2.3 Fertilizer**. Fertilizer shall be standard commercial fertilizers supplied separately or in mixtures containing the percentages of total nitrogen, available phosphoric acid, and water-soluble potash. They shall be applied at the rate and to the depth specified and shall meet the requirements of applicable state laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. No cyanamide compounds or hydrated lime shall be permitted in mixed fertilizers.

The fertilizers may be supplied in one of the following forms:

- a. A dry, free-flowing fertilizer suitable for application by a common fertilizer spreader;
- b. A finely-ground fertilizer soluble in water, suitable for application by power sprayers; or

c. A granular or pellet form suitable for application by blower equipment.

Fertilizers shall be 10% nitrogen, 10% phosphoric acid and 10% commercial fertilizer and shall be spread at the rate of 1,000 lbs/acre.

**901-2.4 Soil for repairs.** The soil for fill and topsoiling of areas to be repaired shall be at least of equal quality to that which exists in areas adjacent to the area to be repaired. The soil shall be relatively free from large stones, roots, stumps, or other materials that will interfere with subsequent sowing of seed, compacting, and establishing turf, and shall be approved by the Engineer before being placed.

#### **CONSTRUCTION METHODS**

**901-3.1** Advance preparation and cleanup. After grading of areas has been completed and before applying fertilizer and ground limestone, areas to be seeded shall be raked or otherwise cleared of stones larger than 2 inches (50 mm) in any diameter, sticks, stumps, and other debris that might interfere with sowing of seed, growth of grasses, or subsequent maintenance of grass-covered areas. If any damage by erosion or other causes has occurred after the completion of grading and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage include filling gullies, smoothing irregularities, and repairing other incidental damage.

An area to be seeded shall be considered a satisfactory seedbed without additional treatment if it has recently been thoroughly loosened and worked to a depth of not less than 5 inches as a result of grading operations and, if immediately prior to seeding, the top 3 inches of soil is loose, friable, reasonably free from large clods, rocks, large roots, or other undesirable matter, and if shaped to the required grade.

When the area to be seeded is sparsely sodded, weedy, barren and unworked, or packed and hard, any grass and weeds shall first be cut or otherwise satisfactorily disposed of, and the soil then scarified or otherwise loosened to a depth not less than 5 inches. Clods shall be broken, and the top 3 inches of soil shall be worked into a satisfactory seedbed by discing, or by use of cultipackers, rollers, drags, harrows, or other appropriate means.

#### 901-3.2 Dry application method.

**a. Liming.** Lime shall be applied separately and prior to the application of any fertilizer or seed and only on seedbeds that have previously been prepared as described above. The lime shall then be worked into the top 3 inches of soil after which the seedbed shall again be properly graded and dressed to a smooth finish.

**b.** Fertilizing. Following advance preparations and cleanup fertilizer shall be uniformly spread at the rate that will provide not less than the minimum quantity stated in paragraph 901-2.3.

**c. Seeding.** Grass seed shall be sown at the rate specified in paragraph 901-2.1 immediately after fertilizing. The fertilizer and seed shall be raked within the depth range stated in the special provisions. Seeds of legumes, either alone or in mixtures, shall be inoculated before mixing or sowing, in accordance with the instructions of the manufacturer of the inoculant. When seeding is required at other than the seasons shown on the plans or in the special provisions, a cover crop shall be sown by the same methods required for grass and legume seeding.

**d. Rolling.** After the seed has been properly covered, the seedbed shall be immediately compacted by means of an approved lawn roller, weighing 40 to 65 pounds per foot of width for clay soil (or any soil having a tendency to pack), and weighing 150 to 200 pounds per foot of width for sandy or light soils.

**e. Bird Repellant.** Apply an approved bird repellant product in accordance with manufacturers recommendation to all seeded areas in the approach to Runways 19 and 27.

#### 901-3.3 Wet application method.

**a.** General. The Contractor may elect to apply seed and fertilizer (and lime, if required) by spraying them on the previously prepared seedbed in the form of an aqueous mixture and by using the methods and equipment described herein. The rates of application shall be as specified in the special provisions.

**b.** Spraying equipment. The spraying equipment shall have a container or water tank equipped with a liquid level gauge calibrated to read in increments not larger than 50 gallons over the entire range of the tank capacity, mounted so as to be visible to the nozzle operator. The container or tank shall also be equipped with a mechanical power-driven agitator capable of keeping all the solids in the mixture in complete suspension at all times until used.

The unit shall also be equipped with a pressure pump capable of delivering 100 gallons per minute at a pressure of 100 lb / sq inches. The pump shall be mounted in a line that will recirculate the mixture through the tank whenever it is not being sprayed from the nozzle. All pump passages and pipelines shall be capable of providing clearance for 5/8-inch solids. The power unit for the pump and agitator shall have controls mounted so as to be accessible to the nozzle operator. There shall be an indicating pressure gauge connected and mounted immediately at the back of the nozzle.

The nozzle pipe shall be mounted on an elevated supporting stand in such a manner that it can be rotated through 360 degrees horizontally and inclined vertically from at least 20 degrees below to at least 60 degrees above the horizontal. There shall be a quick-acting, three-way control valve connecting the recirculating line to the nozzle pipe and mounted so that the nozzle operator can control and regulate the amount of flow of mixture delivered to the nozzle. At least three different types of nozzles shall be a close-range ribbon nozzle, one a medium-range ribbon nozzle, and one a long-range jet nozzle. For case of removal and cleaning, all nozzles shall be connected to the nozzle pipe by means of quick-release couplings.

In order to reach areas inaccessible to the regular equipment, an extension hose at least 50 feet in length shall be provided to which the nozzles may be connected.

**c. Mixtures.** Lime, if required, shall be applied separately, in the quantity specified, prior to the fertilizing and seeding operations. Not more than 220 pounds of lime shall be added to and mixed with each 100 gallons of water. Seed and fertilizer shall be mixed together in the relative proportions specified, but not more than a total of 220 pounds of these combined solids shall be added to and mixed with each 100 gallons of water.

All water used shall be obtained from fresh water sources and shall be free from injurious chemicals and other toxic substances harmful to plant life. Brackish water shall not be used at any time. The Contractor shall identify to the Engineer all sources of water at least two (2) weeks prior to use. The Engineer may take samples of the water at the source or from the tank at any time and have a laboratory test the samples for chemical and saline content. The Contractor shall not use any water from any source that is disapproved by the Engineer following such tests.

All mixtures shall be constantly agitated from the time they are mixed until they are finally applied to the seedbed. All such mixtures shall be used within two (2) hours from the time they were mixed, or they shall be wasted and disposed of at approved locations.

**d.** Spraying. Lime, if required, shall be sprayed only upon previously prepared seedbeds. After the applied lime mixture has dried, the lime shall be worked into the top 3 inches, after which the seedbed shall again be properly graded and dressed to a smooth finish.

Mixtures of seed and fertilizer shall only be sprayed upon previously prepared seedbeds on which the lime, if required, shall already have been worked in. The mixtures shall be applied by means of a high-pressure spray that shall always be directed upward into the air so that the mixtures will fall to the ground like rain in a uniform spray. Nozzles or sprays shall never be directed toward the ground in such a manner as might produce erosion or runoff.

Particular care shall be exercised to ensure that the application is made uniformly and at the prescribed rate and to guard against misses and overlapped areas. Proper predetermined quantities of the mixture in accordance with specifications shall be used to cover specified sections of known area.

Checks on the rate and uniformity of application may be made by observing the degree of wetting of the ground or by distributing test sheets of paper or pans over the area at intervals and observing the quantity of material deposited thereon. On surfaces that are to be mulched as indicated by the plans or designated by the Engineer, seed and fertilizer applied by the spray method need not be raked into the soil or rolled. However, on surfaces on which mulch is not to be used, the raking and rolling operations will be required after the soil has dried.

**901-3.4 Maintenance of seeded areas.** The Contractor shall protect seeded areas against traffic or other use by warning signs or barricades, as approved by the Engineer. Surfaces gullied or otherwise damaged following seeding shall be repaired by regrading and reseeding as directed. The Contractor shall mow, water as directed, and otherwise maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work.

When either the dry or wet application method outlined above is used for work done out of season, it will be required that the Contractor establish a good stand of grass of uniform color and density to the satisfaction of the Engineer. A grass stand shall be considered adequate when bare spots are one square foot or less, randomly dispersed, and do not exceed 3% of the area seeded.

#### METHOD OF MEASUREMENT

**901-4.1** The quantity of seeding *and mulching with bird repellant* to be paid for shall be the number of **acres** measured on the ground surface, completed and accepted.

#### **BASIS OF PAYMENT**

**901-5.1** Payment shall be made at the contract unit price per acre or fraction thereof, which price and payment shall be full compensation for furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

Payment will be made under:

T-901-5.1	Hydroseeding – per acre	
	MATERIAL REQUIREMENTS	
ASTM C602	Standard Specification for Agricultural Liming Materials	
ASTM D977	Standard Specification for Emulsified Asphalt	
FED SPEC	JJJ-S-181, Federal Specification, Seeds, Agricultural	

## END OF ITEM T-901

#### **ITEM T-904 SODDING**

#### DESCRIPTION

**904-1.1** This item shall consist of furnishing, hauling, and placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the Engineer.

#### MATERIALS

**904-2.1 Sod.** Sod furnished by the Contractor shall be *Bermuda and* have a good cover of living or growing grass. This shall be interpreted to include grass that is seasonally dormant during the cold or dry seasons and capable of renewing growth after the dormant period. All sod shall be obtained from areas where the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign plants, large stones, roots, or other materials that might be detrimental to the development of the sod or to future maintenance. At least 70% of the plants in the cut sod shall be composed of Bermuda, and any vegetation more than 6 inches in height shall be mowed to a height of 3 inches or less before sod is lifted. Sod, including the soil containing the roots and the plant growth showing above, shall be cut uniformly to a thickness not less than that stated in the special provisions.

**904-2.2 Lime.** Lime shall be ground limestone containing not less than 85% of total carbonates and shall be ground to such fineness that 90% will pass through a No. 20 mesh sieve and 50% will pass through a No. 100 mesh sieve. Coarser material will be acceptable, providing the rates of application are increased to provide not less than the minimum quantities and depth specified in the special provisions on the basis of the two sieve requirements above. Dolomitic lime or a high magnesium lime shall contain at least 10% of magnesium oxide. Lime shall be applied at the rate of **2 tons per acres**. All liming materials shall conform to the requirements of ASTM C602.

**904-2.3 Fertilizer.** Fertilizer shall be standard commercial fertilizers supplied separately or in mixtures containing the percentages of total nitrogen, available phosphoric acid, and water-soluble potash. They shall be applied at the rate and to the depth specified and shall meet the requirements of applicable state laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. No cyanamide compounds or hydrated line shall be permitted in mixed fertilizers.

The fertilizers may be supplied in one of the following forms:

- a. A dry, free-flowing fertilizer suitable for application by a common fertilizer spreader;
- b. A finely-ground fertilizer soluble in water, suitable for application by power sprayers; or
- **c.** A granular or pellet form suitable for application by blower equipment.

Fertilizers shall be **mixed grade** commercial fertilizer and shall be spread at the rate of **1,000 lbs. per acre**.

**904-2.4 Water.** The water shall be sufficiently free from oil, acid, alkali, salt, or other harmful materials that would inhibit the growth of grass. It shall be subject to the approval of the Engineer prior to use.

**904-2.5 Soil for repairs.** The soil for fill and topsoiling of areas to be repaired shall be at least of equal quality to that which exists in areas adjacent to the area to be repaired. The soil shall be relatively free from large stones, roots, stumps, or other materials that will interfere with subsequent sowing of seed, compacting, and establishing turf, and shall be approved by the Engineer before being placed.

#### **CONSTRUCTION METHODS**

**904-3.1 General.** Areas to be solid, strip, or spot sodded shall be shown on the plans. Areas requiring special ground surface preparation such as tilling and those areas in a satisfactory condition that are to remain undisturbed shall also be shown on the plans.

Suitable equipment necessary for proper preparation of the ground surface and for the handling and placing of all required materials shall be on hand, in good condition, and shall be approved by the Engineer before the various operations are started. The Contractor shall demonstrate to the Engineer before starting the various operations that the application of required materials will be made at the specified rates.

**904-3.2 Preparing the ground surface.** After grading of areas has been completed and before applying fertilizer and limestone, areas to be sodded shall be raked or otherwise cleared of stones larger than 2 inches in any diameter, sticks, stumps, and other debris which might interfere with sodding, growth of grasses, or subsequent maintenance of grass-covered areas. If any damage by erosion or other causes occurs after grading of areas and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage. This may include filling gullies, smoothing irregularities, and repairing other incidental damage.

**904-3.3 Applying fertilizer and ground limestone.** Following ground surface preparation, fertilizer shall be uniformly spread at a rate which will provide not less than the minimum quantity of each fertilizer ingredient, as stated in the special provisions. If use of ground limestone is required, it shall then be spread at a rate that will provide not less than the minimum quantity stated in the special provisions. These materials shall be incorporated into the soil to a depth of not less than 2 inches by discing, raking, or other suitable methods. Any stones larger than 2 inches in any diameter, large clods, roots, and other litter brought to the surface by this operation shall be removed.

**904-3.4 Obtaining and delivering sod.** After inspection and approval of the source of sod by the Engineer, the sod shall be cut with approved sod cutters to such a thickness that after it has been transported and placed on the prepared bed, but before it has been compacted, it shall have a uniform thickness of not less than 2 inches. Sod sections or strips shall be cut in uniform widths, not less than 10 inches, and in lengths of not less than 18 inches, but of such length as may be readily lifted without breaking, tearing, or loss of soil. Where strips are required, the sod must be rolled without damage with the grass folded inside. The Contractor may be required to mow high grass before cutting sod.

The sod shall be transplanted within 24 hours from the time it is stripped, unless circumstances beyond the Contractor's control make storing necessary. In such cases, sod shall be stacked, kept moist, and protected from exposure to the air and sun and shall be kept from freezing. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. Where the soil is too dry, permission to cut sod may be granted only after it has been watered sufficiently to moisten the soil to the depth the sod is to be cut.

**904-3.5 Laying sod.** Sodding shall be performed only during the seasons when satisfactory results can be expected. Frozen sod shall not be used, and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the Engineer, provided the sod bed is watered to moisten the soil to a depth of at least 4 inches immediately prior to laying the sod.

The sod shall be moist and shall be placed on a moist earth bed. Pitch forks shall not be used to handle sod and dumping from vehicles shall not be permitted. The sod shall be carefully placed by hand, edge to edge and with staggered joints, in rows at right angles to the slopes, commencing at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface and ensure knitting without displacement of the sod or deformation of the surfaces of sodded areas. Where the sod may be displaced during sodding operations, the workmen, when replacing it, shall work from ladders or treaded planks to prevent further displacement. Screened soil of good quality shall be used to fill all cracks between sods. The quantity of the fill soil shall not cause smothering of the grass. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately one inch below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.

On slopes steeper than one (1) vertical to 2-1/2 horizontal and in v-shaped or flat-bottom ditches or gutters, the sod shall be pegged with wooden pegs not less than 12 inches in length and have a cross-sectional area of not less than 3/4 sq inch. The pegs shall be driven flush with the surface of the sod.

**904-3.6 Watering.** Adequate water and watering equipment must be on hand before sodding begins, and sod shall be kept moist until it has become established and its continued growth assured. In all cases, watering shall be done in a manner that will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface.

#### 904-3.7 Establishing turf.

**a.** General. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue until final inspection and acceptance of the work.

**b. Protection.** All sodded areas shall be protected against traffic or other use by warning signs or barricades approved by the Engineer.

**c. Mowing.** The Contractor shall mow the sodded areas with approved mowing equipment, depending upon climatic and growth conditions and the needs for mowing specific areas. In the event that weeds or other undesirable vegetation are permitted to grow to such an extent that, either cut or uncut, they threaten to smother the sodded species, they shall be mowed and the clippings raked and removed from the area.

**904-3.8 Repairing.** When the surface has become gullied or otherwise damaged during the period covered by this contract, the affected areas shall be repaired to re-establish the grade and the condition of the soil, as directed by the Engineer, and shall then be sodded as specified in paragraph 904-3.5.

#### METHOD OF MEASUREMENT

**904-4.1** This item shall be measured on the basis of the area in square yards (square meters) of the surface covered with sod and accepted.

#### **BASIS OF PAYMENT**

**904-5.1** This item will be paid for on the basis of the contract unit price per square yard (square meter) for sodding, which price shall be full compensation for all labor, equipment, material, staking, and incidentals necessary to satisfactorily complete the items as specified. Payment will be made under:

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Item T-904-5.1 Bermuda Sodding - per square yard

#### MATERIAL REQUIREMENTS

ASTM C602

Standard Specification for Agricultural Liming Materials

END OF ITEM T-904

SAC 30596 - TECHNICAL SPECIFICATIONS T-904

## **ITEM T-908 MULCHING**

#### DESCRIPTION

**908-1.1** This item shall consist of furnishing, hauling, placing, and securing mulch on surfaces indicated on the plans or designated by the Engineer.

#### MATERIALS

**908-2.1 Mulch material.** Acceptable mulch shall be the materials listed below or any approved locally available material that is similar to those specified. Mulch shall be free from noxious weeds, mold, and other deleterious materials. Mulch materials, which contain matured seed of species that would volunteer and be detrimental to the proposed overseeding, or to surrounding farmland, will not be acceptable. Straw or other mulch material which is fresh and/or excessively brittle, or which is in such an advanced stage of decomposition as to smother or retard the planted grass, will not be acceptable.

a. Hay. NOT USED.

b. Straw. NOT USED.

c. Hay mulch containing seed. NOT USED.

**d. Manufactured mulch**. Cellulose-fiber or wood-pulp mulch shall be products commercially available for use in spray applications.

e. Asphalt binder. Asphalt binder material shall conform to the requirements of ASTM D977, Type SS-1 or RS-1.

**908-2.2 Inspection.** The RPR shall be notified of sources and quantities of mulch materials available and the Contractor shall furnish him with representative samples of the materials to be used 30 days before delivery to the project. These samples may be used as standards with the approval of the RPR and any materials brought on the site that do not meet these standards shall be rejected.

#### **CONSTRUCTION METHODS**

**908-3.1 Mulching.** Before spreading mulch, all large clods, stumps, stones, brush, roots, and other foreign material shall be removed from the area to be mulched. Mulch shall be applied immediately after seeding. The spreading of the mulch may be by hand methods, blower, or other mechanical methods, provided a uniform covering is obtained. Mulch material shall be furnished, hauled, and evenly applied on the area shown on the plans or designated by the RPR. Straw or hay shall be spread over the surface to a uniform thickness at the rate of 2 to 3 tons per acre (1800 - 2700 kg per acre) to provide a loose depth of not less than 1-1/2 inches (38 cm) nor more than 3 inches (75 mm). Other organic material shall be spread at the rate directed by the RPR. Mulch may be blown on the slopes and the use of cutters in the equipment for this purpose will be permitted to the extent that at least 95% of the mulch in place on the slope shall be 6 inches (150 mm) or more in length. When mulches applied by the blowing method are cut, the loose depth in place shall be not less than one inch (25 mm) nor more than 2 inches (50 mm).

**908-3.2 Securing mulch.** The mulch shall be held in place by light discing, a very thin covering of topsoil, pins, stakes, wire mesh, asphalt binder, or other adhesive material approved by the RPR. Where mulches have been secured by either of the asphalt binder methods, it will not be permissible to walk on the slopes after the binder has been applied. When an application of asphalt binder material is used to secure the mulch, the Contractor must take every precaution to guard against damaging or disfiguring structures or property on or adjacent to the areas worked and will be held responsible for any such damage resulting from the operation.

If the "peg and string" method is used, the mulch shall be secured by the use of stakes or wire pins driven into the ground on 5-foot (1.5-m) centers or less. Binder twine shall be strung between adjacent stakes in straight lines and

crisscrossed diagonally over the mulch, after which the stakes shall be firmly driven nearly flush to the ground to draw the twine down tight onto the mulch.

#### 908-3.3 Care and repair.

**a.** The Contractor shall care for the mulched areas until final acceptance of the project. Care shall consist of providing protection against traffic or other use by placing warning signs, as approved by the RPR, and erecting any barricades that may be shown on the plans before or immediately after mulching has been completed on the designated areas.

**b.** The Contractor shall be required to repair or replace any mulch that is defective or becomes damaged until the project is finally accepted. When, in the judgment of the RPR, such defects or damages are the result of poor workmanship or failure to meet the requirements of the specifications, the cost of the necessary repairs or replacement shall be borne by the Contractor.

**c.** If the "asphalt spray" method is used, all mulched surfaces shall be sprayed with asphalt binder material so that the surface has a uniform appearance. The binder shall be uniformly applied to the mulch at the rate of approximately 8 gallons (32 liters) per 1,000 square feet (100 sq m), or as directed by the RPR, with a minimum of 6 gallons (24 liters) and a maximum of 10 gallons (40 liters) per 1,000 square feet (100 sq m) depending on the type of mulch and the effectiveness of the binder securing it. Asphalt binder material may be sprayed on the mulched slope areas from either the top or the bottom of the slope. An approved spray nozzle shall be used. The nozzle shall be operated at a distance of not less than 4 feet (1.2 m) from the surface of the mulch and uniform distribution of the asphalt material shall be required. A pump or an air compressor of adequate capacity shall be used to ensure uniform distribution of the asphalt material.

**d.** If the "asphalt mix" method is used, the mulch shall be applied by blowing, and the asphalt binder material shall be sprayed into the mulch as it leaves the blower. The binder shall be uniformly applied to the mulch at the rate of approximately 8 gallons (32 liters) per 1,000 square feet (100 sq m) or as directed by the RPR, with a minimum of 6 gallons (24 liters) and a maximum of 10 gallons (40 liters) per 1,000 square feet (100 sq m) depending on the type of mulch and the effectiveness of the binder securing it.

#### METHOD OF MEASUREMENT

**908-4.1** Mulching shall be measured in square yards (square meters) on the basis of the actual surface area acceptably mulched. *There will be no separate measurement for this item.* 

#### **BASIS OF PAYMENT**

**908-5.1** Payment will be made at the contract unit price per square yard (square meter) for mulching. The price shall be full compensation for furnishing all materials and for placing and anchoring the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

There will be no separate payment for this item.

## REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D977	Standard Specification for Emulsified Asphalt
Advisory Circulars (AC)	
AC 150/5200-33	Hazardous Wildlife Attractants on or Near Airports
FAA/United States Department of Agriculture	

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

## END OF ITEM T-908

#### **ITEM D-701 PIPE FOR STORM DRAINS AND CULVERTS**

#### DESCRIPTION

**701-1.1** This item shall consist of the construction of pipe culverts and storm drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans.

#### MATERIALS

701-2.1 Materials shall meet the requirements shown on the plans and specified below.

**701-2.2 Pipe.** The pipe shall be of the type called for on the plans or in the proposal and shall be in accordance with the following appropriate requirements:

ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM C507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe

**701-2.3 Concrete.** Concrete for pipe cradles shall have a minimum compressive strength of 2000 psi (13.8 MPa) at 28 days and conform to the requirements of ASTM C94.

**701-2.4 Rubber gaskets.** Rubber gaskets for rigid pipe shall conform to the requirements of ASTM C443. Rubber gaskets for PVC pipe, polyethylene, and polypropylene pipe shall conform to the requirements of ASTM F477. Rubber gaskets for zinc-coated steel pipe and precoated galvanized pipe shall conform to the requirements of ASTM D1056, for the "RE" closed cell grades. Rubber gaskets for steel reinforced thermoplastic ribbed pipe shall conform to the requirements of ASTM F477.

**701-2.5 Joint mortar.** Pipe joint mortar shall consist of one-part Portland cement and two parts sand. The Portland cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

701-2.6 Joint fillers. Poured filler for joints shall conform to the requirements of ASTM D6690.

701-2.7 Plastic gaskets. Plastic gaskets shall conform to the requirements of AASHTO M198 (Type B).

701-2.8. Controlled low-strength material (CLSM). CLSM is not allowed.

#### **CONSTRUCTION METHODS**

**701-3.1 Excavation.** The width of the pipe trench shall be sufficient to permit satisfactory jointing of the pipe and thorough tamping of the bedding material under and around the pipe, but it shall not be less than the external diameter of the pipe plus 6 inches (150 mm) on each side. The trench walls shall be approximately vertical.

The Contractor shall comply with all current Federal, state and local rules and regulations governing the safety of men and materials during the excavation, installation and backfilling operations. Specifically, the Contractor shall observe that all requirements of the Occupational Safety and Health Administration (OSHA) relating to excavations, trenching and shoring are strictly adhered to. The width of the trench shall be sufficient to permit satisfactorily jointing of the pipe and thorough compaction of the bedding material under the pipe and backfill material around the pipe, but it shall not be greater than the widths shown on the plans trench detail. The trench bottom shall be shaped to fully and uniformly support the bottom quadrant of the pipe.

Where rock, hardpan, or other unyielding material is encountered, the Contractor shall remove it from below the foundation grade for a depth of at least 8 inch (200 mm) or 1/2 inch (12 mm) for each foot of fill over the top of the pipe (whichever is greater) but for no more than three-quarters of the nominal diameter of the pipe. The excavation below grade shall be backfilled with selected fine compressible material, such as silty clay or loam, and lightly compacted in layers not over 6 inches (150 mm) in uncompacted depth to form a uniform but yielding foundation.

Where a firm foundation is not encountered at the grade established, due to soft, spongy, or other unstable soil, the unstable soil shall be removed and replaced with approved granular material for the full trench width. The Engineer shall determine the depth of removal necessary. The granular material shall be compacted to provide adequate support for the pipe.

The excavation for pipes placed in embankment fill shall not be made until the embankment has been completed to a height above the top of the pipe as shown on the plans.

Contractor shall protect excavations by shoring, bracing, sheet piling, underpinning, or other methods required to prevent any excessive widening or sloughing of the trench which may be detrimental to human safety, to the pipe or appurtenances being installed, or to existing facilities or structures. Contractor shall be responsible for underpinning adjacent structures which may be damaged by excavation work, including service utilities and pipe chases. These are incidental costs to pipe installation.

**701-3.2 Bedding.** The pipe bedding shall conform to the class specified on the plans. The bedding surface for the pipe shall provide a firm foundation of uniform density throughout the entire length of the pipe. When no bedding class is specified or detailed on the plans, the requirements for Class C bedding shall apply.

a. Rigid pipe. Class A bedding shall consist of a continuous concrete cradle conforming to the plan details.

Class B bedding shall consist of a bed of granular material having a thickness of at least 6 inches (150 mm) below the bottom of the pipe and extending up around the pipe for a depth of not less than 30% of the pipe's vertical outside diameter. The layer of bedding material shall be shaped to fit the pipe for at least 10% of the pipe's vertical diameter and shall have recesses shaped to receive the bell of bell and spigot pipe. The bedding material shall be sand or select sandy soil with 100% passing a 3/8-inch (9 mm) sieve and not more than 10% passing a No. 200 (0.075 mm) sieve.

Class C bedding shall consist of bedding the pipe in its natural foundation material to a depth of not less than 10% of the pipe's vertical outside diameter. The bed shall be shaped to fit the pipe and shall have recesses shaped to receive the bell of bell and spigot pipe.

**b.** Flexible pipe. For flexible pipe, the bed shall be roughly shaped to fit the pipe, and a bedding blanket of sand or fine granular material shall be provided as follows:

Pipe Corrugation Depth		Minimum Bedding Depth	
inch	mm	inch	mm
1/2	12	1	25
1	25	2	50
2	50	3	75
2-1/2	60	3-1/2	90

**c. PVC, polyethylene, and polypropylene pipe.** For PVC, polyethylene, and polypropylene pipe, the bedding material shall consist of coarse sands and gravels with a maximum particle size of 3/4 inches (19 mm). For pipes installed under paved areas, no more than 12% of the material shall pass the No. 200 (0.075 mm) sieve. For all other areas, no more than 50% of the material shall pass the No. 200 (0.075 mm) sieve. The bedding shall have a thickness of at least 6 inches (150 mm) below the bottom of the pipe and extend up around the pipe for a depth of not less than 50% of the pipe's vertical outside diameter.

**701-3.3 Laying pipe.** The pipe laying shall begin at the lowest point of the trench and proceed upgrade. The lower segment of the pipe shall be in contact with the bedding throughout its full length. Bell or groove ends of rigid pipes and outside circumferential laps of flexible pipes shall be placed facing upgrade.

Paved or partially lined pipe shall be placed so that the longitudinal center line of the paved segment coincides with the flow line.

Elliptical and elliptically reinforced concrete pipes shall be placed with the manufacturer's reference lines designating the top of the pipe within five degrees of a vertical plane through the longitudinal axis of the pipe.

**701-3.4 Joining pipe.** Joints shall be made with (1) Portland cement mortar, (2) Portland cement grout, (3) rubber gaskets, (4) plastic gaskets, or (5) coupling bands.

Mortar joints shall be made with an excess of mortar to form a continuous bead around the outside of the pipe and shall be finished smooth on the inside. Molds or runners shall be used for grouted joints to retain the poured grout. Rubber ring gaskets shall be installed to form a flexible watertight seal.

**a.** Concrete pipe. Concrete pipe may be either bell and spigot or tongue and groove. The method of joining pipe sections shall be so the ends are fully entered and the inner surfaces are reasonably flush and even. Joints shall be thoroughly wetted before applying mortar or grout.

**b.** Metal pipe. Metal pipe shall be firmly joined by form-fitting bands conforming to the requirements of ASTM A760 for steel pipe and AASHTO M196 for aluminum pipe.

**c. PVC, polyethylene and polypropylene pipe.** Joints for PVC, Polyethylene, and Polypropylene pipe shall conform to the requirements of ASTM D3212 when watertight joints are required. Joints for PVC and Polyethylene pipe shall conform to the requirements of AASHTO M304 when soil tight joints are required. Fittings for polyethylene pipe shall conform to the requirements of AASHTO M252 or ASTM M294. Fittings for polypropylene pipe shall conform to ASTM F2881, ASTM F2736, or ASTM F2764.

**701-3.5 Backfilling.** Pipes shall be inspected before any backfill is placed; any pipes found to be out of alignment, unduly settled, or damaged shall be removed and re-laid or replaced at the Contractor's expense.

Material for backfill shall be fine, readily compatible soil or granular material selected from the excavation or a source of the Contractor's choosing. It shall not contain frozen lumps, stones that would be retained on a 2-inch (50 mm) sieve, chunks of highly plastic clay, or other objectionable material. Granular backfill material shall have 95% or more passing then a 1/2-inch (12 mm) sieve, with 95% or more being retained on the No. 4 (4.75 mm) sieve.

When the top of the pipe is even with or below the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches (150 mm) on each side of the pipe and shall be brought up one foot (30 cm) above the top of the pipe or to natural ground level, whichever is greater. Thoroughly compact the backfill material under the haunches of the pipe without displacing the pipe. Material shall be brought up evenly on each side of the pipe for the full length of the pipe.

When the top of the pipe is above the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches (150 mm) and shall be brought up evenly on each side of the pipe to one foot (30 cm) above the top of the pipe. The width of backfill on each side of the pipe for the portion above the top of the trench shall be equal to twice the pipe's diameter or 12 feet (3.7 m), whichever is less.

For PVC, polyethylene, and polypropylene pipe, the backfill shall be placed in two stages; first to the top of the pipe and then at least 12 inches (300 mm) over the top of the pipe. The backfill material shall meet the requirements of paragraph 701-3.2c.

All backfill shall be compacted to the density required under Item P-152.

It shall be the Contractor's responsibility to protect installed pipes and culverts from damage due to construction equipment operations. The Contractor shall be responsible for installation of any extra strutting or backfill required to protect pipes from the construction equipment.

701-3.6 CLEANING-OUT OF NEW AND EXISTING PIPES. All new and existing pipes are to be kept clear of debris and silt at all times during construction. After completion of all earthwork activities and the placement of all sod and/or seeding and mulching and before final acceptance, all new and existing pipe within the project work area shall be cleaned of all silt, debris, etc. to the satisfaction of the Engineer. This may require the dewatering of the pipe. Care must be taken during this operation so as not to damage the pipe or the surrounding areas. No additional payment will be made for this work. Any damage to the pipe or surrounding areas will be repair by the Contractor to the satisfaction of the Engineer at no additional payment.

701-3.7 FILTER FABRIC. All pipe joints are to be completely wrapped with an approved filter fabric. All costs associated with this work, including supplying the fabric, shall be included in the bid unit price for the pipe.

#### METHOD OF MEASUREMENT

**701-4.1** The length of pipe shall be measured in linear feet of pipe in place, completed, and approved. It shall be measured along the centerline of the pipe from end or inside face of structure to the end or inside face of structure, whichever is applicable. The several classes, types and size shall be measured separately. All fittings shall be included in the footage as typical pipe sections in the pipe being measured.

701-4.2 NOT USED.

701-4.3 NOT USED.

#### **BASIS OF PAYMENT**

**701-5.1** Payment will be made at the contract unit price per linear foot for each kind of pipe of the type and size designated.

These prices shall fully compensate the Contractor for furnishing all materials and for all preparation, excavation, and installation of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the item.

HDPE N-12 is an acceptable substitute except under Davidson Drive, and shall be paid for at the unit price bid for RCP, Class III. HDPE N-12 is required at the two outfalls from the new pond onto the SR-307 ROW per the City of Savannah.

Payment will be made under:

Item D-701-5.1	15" RCP, Class III – per linear foot
Item D-701-5.2	18" RCP, Class III – per linear foot
Item D-701-5.3	24" RCP, Class III – per linear foot
Item D-701-5.4	30" RCP, Class III – per linear foot
Item D-701-5.5	36" RCP, Class III – per linear foot
Item D-701-5.6	42" RCP, Class III – per linear foot
Item D-701-5.7	48" RCP, Class III – per linear foot
Item D-701-5.8	54" RCP, Class III – per linear foot

Item D-701-5.9	60" RCP, Class III – per linear foot
Item D-701-5.10	14"x23" ERCP, Class IV – per linear foot
Item D-701-5.11	38"x60" ERCP, Class IV – per linear foot
Item D-701-5.12	Concrete Collar Pipe Connection, 15" RCP, Class III - per each
Item D-701-5.13	Concrete Collar Pipe Connection, 18" RCP, Class III - per each
Item D-701-5.14	Concrete Collar Pipe Connection, 24" RCP, Class III - per each
Item D-701-5.15	Concrete Collar Pipe Connection, 36" RCP, Class III - per each
Item D-701-5.16	Concrete Collar Pipe Connection, 42" RCP, Class III - per each
Item D-701-5.17	Concrete Collar Pipe Connection, 48" RCP, Class III - per each

# MATERIAL REQUIREMENTS

AASHTO M167	Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M190	Standard Specification for Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe Arches
AASHTO M196	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
AASHTO M198	Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
AASHTO M219	Standard Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M243	Standard Specification for Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
AASHTO M252	Standard Specification for Corrugated Polyethylene Drainage Pipe
AASHTO M294	Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12-to 60-in.) Diameter
AASHTO M304	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
AASHTO MP20	Standard Specification for Steel Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 900-mm (12- to 36-in.) Diameter
ASTM A760	Standard Specification for Corrugated Steel Pipe, Metallic Coated for Sewers and Drains
ASTM A761	Standard Specification for Corrugated Steel Structural Plate, Zinc Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
ASTM A762	Standard Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains
ASTM A849	Standard Specification for Post-Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe
ASTM B745	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
ASTM C14	Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe
ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

ASTM C94	Standard Specification for Ready Mixed Concrete
ASTM C144	Standard Specification for Aggregate for Masonry Mortar
ASTM C150	Standard Specification for Portland Cement
ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
ASTM C506	Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
ASTM C507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe
ASTM C655	Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain and Sewer Pipe
ASTM C1433	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
ASTM D1056	Standard Specification for Flexible Cellular Materials Sponge or Expanded Rubber
ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM D3212	Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements
ASTM F477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F667	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings
ASTM F714	Standard Specification for Polyethylene (PE) Plastic Pipe (DR PR) Based on Outside Diameter
ASTM F794	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe & Fittings Based on Controlled Inside Diameter
ASTM F894	Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drainpipe
ASTM F949	Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings
ASTM F2435	Standard Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe
ASTM F2562	Specification for Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage
ASTM F2736	Standard Specification for 6 to 30 in. (152 to 762 mm) Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe
ASTM F2764	Standard Specification for 30 to 60 in. (750 to 1500 mm) Polypropylene (PP) Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications
ASTM F2881	Standard Specification for 12 to 60 in. (300 to 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications

# END ITEM D-701

#### ITEM D-751 MANHOLES, CATCH BASINS, INLETS & INSPECTION HOLES

#### DESCRIPTION

**751-1.1** This item shall consist of construction of manholes, catch basins, inlets, and inspection holes, in accordance with these specifications, at the specified locations and conforming to the lines, grades, and dimensions shown on the plans or required by the Engineer. *These items shall conform to the latest edition (English Units) of the State of Georgia Department of Transportation Design Standards for the Design, Construction, Maintenance and Utility Operations of the State Highway System (Topic No. 625-010-003) unless noted otherwise in the Project plans.* 

#### MATERIALS

**751-2.1 Brick.** The brick shall conform to the requirements of ASTM C32, Grade MS.

**751-2.2 Mortar.** Mortar shall consist of one-part Portland cement and two parts sand. The Portland cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

**751-2.3 Concrete.** Plain and reinforced concrete used in structures, connections of pipes with structures, and the support of structures or frames shall conform to the requirements of Item P-610.

**751-2.4 Precast concrete pipe manhole rings.** Precast concrete pipe manhole rings shall conform to the requirements of ASTM C478. Unless otherwise specified, the risers and offset cone sections shall have an inside diameter of not less than 36 inches (90 cm) nor more than 48 inches (120 cm). There shall be a gasket between individual sections and sections cemented together with mortar on the inside of the manhole.

**751-2.5 Corrugated metal.** Corrugated metal shall conform to the requirements of American Association of State Highway and Transportation Officials (AASHTO) M36.

751-2.6 Frames, covers, and grates. The castings shall conform to one of the following requirements:

a. ASTM A48, Class 35B: Gray iron castings

**b.** ASTM A47: Malleable iron castings

- **c.** ASTM A27: Steel castings
- d. ASTM A283, Grade D: Structural steel for grates and frames
- e. ASTM A536, Grade 65-45-12: Ductile iron castings
- f. ASTM A897, Austempered ductile iron castings

All castings or structural steel units shall conform to the dimensions shown on the plans and shall be designed to support the loadings, aircraft gear configuration and/or direct loading, specified.

Each frame and cover or grate unit shall be provided with fastening members to prevent it from being dislodged by traffic, but which will allow easy removal for access to the structure.

All castings shall be thoroughly cleaned. After fabrication, structural steel units shall be galvanized to meet the requirements of ASTM A123.

**751-2.7 Steps.** The steps or ladder bars shall be gray or malleable cast iron or galvanized steel. The steps shall be the size, length, and shape shown on the plans and those steps that are not galvanized shall be given a coat of bituminous paint, when directed.

#### 751-2.8 Precast inlet structures. Manufactured in accordance with and conforming to ASTM C1433.

#### **CONSTRUCTION METHODS**

#### 751-3.1 Unclassified excavation.

**a.** The Contractor shall excavate for structures and footings to the lines and grades or elevations, shown on the plans, or as staked by the Engineer. The excavation shall be of sufficient size to permit the placing of the full width and length of the structure or structure footings shown. The elevations of the bottoms of footings, as shown on the plans, shall be considered as approximately only; and the Engineer may direct, in writing, changes in dimensions or elevations of footings necessary for a satisfactory foundation.

**b.** Boulders, logs, or any other objectionable material encountered in excavation shall be removed. All rock or other hard foundation material shall be cleaned of all loose material and cut to a firm surface either level, stepped, or serrated, as directed by the Engineer. All seams or crevices shall be cleaned out and grouted. All loose and disintegrated rock and thin strata shall be removed. Where concrete will rest on a surface other than rock, the bottom of the excavation shall not be disturb and excavation to final grade shall not be made until immediately before the concrete or reinforcing is placed.

**c.** The Contractor shall do all bracing, sheathing, or shoring necessary to implement and protect the excavation and the structure as required for safety or conformance to governing laws. The cost of bracing, sheathing, or shoring shall be included in the unit price bid for the structure.

**d.** All bracing, sheathing, or shoring involved in the construction of this item shall be removed by the Contractor after the completion of the structure. Removal shall not disturb, or damage finished masonry. The cost of removal shall be included in the unit price bid for the structure.

**e.** After excavation is completed for each structure, the Contractor shall notify the Engineer. No concrete or reinforcing steel shall be placed until the Engineer has approved the depth of the excavation and the character of the foundation material.

#### 751-3.2 Brick structures.

**a.** Foundations. A prepared foundation shall be placed for all brick structures after the foundation excavation is completed and accepted. Unless otherwise specified, the base shall consist of reinforced concrete mixed, prepared, and placed in accordance with the requirements of Item P-610.

**b.** Laying brick. All brick shall be clean and thoroughly wet before laying so that they will not absorb any appreciable amount of additional water at the time they are laid. All brick shall be laid in freshly made mortar. Mortar not used within 45 minutes after water has been added shall be discarded. Re-tempering of mortar shall not be permitted. An ample layer of mortar shall be spread on the beds and a shallow furrow shall be made in it that can be readily closed by the laying of the brick. All bed and head joints shall be filled solid with mortar. End joints of stretchers and side or cross joints of headers shall be fully buttered with mortar and a shoved joint made to squeeze out mortar at the top of the joint. Any bricks that may be loosened after the mortar has taken its set, shall be removed, cleaned, and re-laid with fresh mortar. No broken or chipped brick shall be used in the face, and no spalls or bats shall be used except where necessary to shape around irregular openings or edges; in which case, full bricks shall be placed at ends or corners where possible, and the bats shall be used in the interior of the course. In making closures, no piece of brick shorter than the width of a whole brick shall be used; and wherever practicable, whole brick shall be used and laid as headers.

**c.** Joints. All joints shall be filled with mortar at every course Exterior faces shall be laid up in advance of backing. Exterior faces shall be plastered or parged with a coat of mortar not less than 3/8 inch (9 mm) thick before the backing is laid up. Prior to parging, all joints on the back of face courses shall be cut flush. Unless otherwise noted, joints shall be not less than 1/4 inch (6 mm) nor more than 1/2 inch (12 mm) wide and the selected joint width shall be maintained uniform throughout the work.

**d. Pointing.** Face joints shall be neatly struck, using the weather-struck joint. All joints shall be finished properly as the laying of the brick progresses. When nails or line pins are used the holes shall be immediately plugged with mortar and pointed when the nail or pin is removed.

**e.** Cleaning. Upon completion of the work all exterior surfaces shall be thoroughly cleaned by scrubbing and washing with water. If necessary, to produce satisfactory results, cleaning shall be done with a 5% solution of muriatic acid which shall then be rinsed off with liberal quantities of water.

**f. Curing and cold weather protection.** The brick masonry shall be protected and kept moist for at least 48 hours after laying the brick. Brick masonry work or pointing shall not be done when there is frost on the brick or when the air temperature is below  $50^{\circ}$ F ( $10^{\circ}$ C) unless the Contractor has, on the project ready to use, suitable covering and artificial heating devices necessary to keep the atmosphere surrounding the masonry at a temperature of not less than  $60^{\circ}$ F ( $16^{\circ}$ C) for the duration of the curing period.

**751-3.3 Concrete structures.** Concrete structures shall be built on prepared foundations, conforming to the dimensions and shape indicated on the plans. The construction shall conform to the requirements specified in Item P-610. Any reinforcement required shall be placed as indicated on the plans and shall be approved by the Engineer before the concrete is placed.

All invert channels shall be constructed and shaped accurately to be smooth, uniform, and cause minimum resistance to flowing water. The interior bottom shall be sloped to the outlet.

**751-3.4 Precast concrete structures.** Precast concrete structures shall conform to ASTM C478. Precast concrete structures shall be constructed on prepared or previously placed slab foundations conforming to the dimensions and locations shown on the plans. All precast concrete sections necessary to build a completed structure shall be furnished. The different sections shall fit together readily. Joints between precast concrete risers and tops shall be full bedded in cement mortar and shall be smoothed to a uniform surface on both interior and exterior of the structure. The top of the upper precast concrete section shall be suitably formed and dimensioned to receive the metal frame and cover or grate, or other cap, as required. Provision shall be made for any connections for lateral pipe, including drops and leads that may be installed in the structure. The flow lines shall be smooth, uniform, and cause minimum resistance to flow. The metal steps that are embedded or built into the side walls shall be aligned and placed at vertical intervals of 12 inches (300 mm). When a metal ladder replaces the steps, it shall be securely fastened into position.

**751-3.5 Corrugated metal structures.** Corrugated metal structures shall be prefabricated. All standard or special fittings shall be furnished to provide pipe connections or branches with the correct dimensions and of sufficient length to accommodate connecting bands. The fittings shall be welded in place to the metal structures. The top of the metal structure shall be designed so that either a concrete slab or metal collar may be attached to allow the fastening of a standard metal frame and grate or cover. Steps or ladders shall be furnished as shown on the plans. Corrugated metal structures shall be constructed on prepared foundations, conforming to the dimensions and locations as shown on the plans. When indicated, the structures shall be placed on a reinforced concrete base.

**751-3.6 Inlet and outlet pipes.** Inlet and outlet pipes shall extend through the walls of the structures a sufficient distance beyond the outside surface to allow for connections. They shall be cut off flush with the wall on the inside surface of the structure, unless otherwise directed. For concrete or brick structures, mortar shall be placed around these pipes to form a tight, neat connection.

**751-3.7 Placement and treatment of castings, frames, and fittings.** All castings, frames, and fittings shall be placed in the positions indicated on the plans or as directed by the Engineer and shall be set true to line and elevation. If frames or fittings are to be set in concrete or cement mortar, all anchors or bolts shall be in place before the concrete or mortar is placed. The unit shall not be disturbed until the mortar or concrete has set.

When frames or fittings are placed on previously constructed masonry, the bearing surface of the masonry shall be brought true to line and grade and shall present an even bearing surface so the entire face or back of the unit will come in contact with the masonry. The unit shall be set in mortar beds and anchored to the masonry as indicated on the plans or as directed by the Engineer. All units shall set firm and secure.

After the frames or fittings have been set in final position, the concrete or mortar shall be allowed to harden for seven (7) days before the grates or covers are placed and fastened down.

**751-3.8 Installation of steps.** The steps shall be installed as indicated on the plans or as directed by the Engineer. When the steps are to be set in concrete, they shall be placed and secured in position before the concrete is placed. When the steps are installed in brick masonry, they shall be placed as the masonry is being built. The steps shall not be disturbed or used until the concrete or mortar has hardened for at least seven (7) days. After seven (7) days, the steps shall be cleaned and painted, unless they have been galvanized.

When steps are required with precast concrete structures, they shall be cast into the side of the sections at the time the sections are manufactured or set in place after the structure is erected by drilling holes in the concrete and cementing the steps in place.

When steps are required with corrugated metal structures, they shall be welded into aligned position at a vertical spacing of 12 inches (300 mm).

Instead of steps, prefabricated ladders may be installed. For brick or concrete structures, the ladder shall be held in place by grouting the supports in drilled holes. For metal structures, the ladder shall be secured by welding the top support to the structure and grouting the bottom support into drilled holes in the foundation or as directed by the Engineer.

#### 751-3.9 Backfilling.

**a.** After a structure has been completed, the area around it shall be backfilled with approved material, in horizontal layers not to exceed 8 inches (200 mm) in loose depth and compacted to the density required in Item P-152. Each layer shall be deposited evenly around the structure to approximately the same elevation. The top of the fill shall meet the elevation shown on the plans or as directed by the Engineer.

**b.** Backfill shall not be placed against any structure until approved by the Engineer. For concrete structures, approval shall not be given until the concrete has been in place seven (7) days, or until tests establish that the concrete has attained sufficient strength to withstand any pressure created by the backfill and placing methods.

**c.** Backfill shall not be measured for direct payment. Performance of this work shall be considered an obligation of the Contractor covered under the contract unit price for the structure involved.

**751-3.10 Cleaning and restoration of site.** After the backfill is completed, the Contractor shall dispose of all surplus material, dirt, and rubbish from the site. Surplus dirt may be deposited in embankments, shoulders, or as approved by the Engineer. The Contractor shall restore all disturbed areas to their original condition. The Contractor shall remove all tools and equipment, leaving the entire site free, clear, and in good condition.

751-3.11 CLEANING-OUT OF NEW AND EXISTING STRUCTURES. All new and existing structures are to be kept clear of debris and silt at all times during construction. After completion of all earthwork actives and the placement of all sod and/or seeding and mulching and before final acceptance, all new and existing drainage structures within the project work area including manholes, catch basins, inlets and inspection holes shall be cleaned of all silt, debris, etc. to the satisfaction of the Engineer. This may require the de-watering of the structures. Care must be taken during this operation so as not to damage the structures or the surrounding areas will be repair by the Contractor to the satisfaction of the Engineer at no additional payment.

#### METHOD OF MEASUREMENT

**751-4.1** Manholes, catch basins, inlets, and inspection holes shall be measured by the unit.

#### **BASIS OF PAYMENT**

**751-5.1** The accepted quantities of manholes, catch basins, inlets, and inspection holes will be paid for at the contract unit price per each in place when completed. This price shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling and placing of the materials; furnishing and installation of

such specials and connections to pipes and other structures as may be required to complete the item as shown on the plans; and for all labor equipment, tools and incidentals necessary to complete the structure.

Payment will be made under:

Item D-751-5.1	Structure SD01 – per each
Item D-751-5.1A	Structure SD01A (Including Security Bar Grates) - per each
Item D-751-5.2	Structure SD02A – per each
Item D-751-5.2A	Structure SD02C (Including Security Bar Grates) - per each
Item D-751-5.3	Structure SD02B – per each
Item D-751-5.3A	Structure SD020 (Including Security Bar Grates) - per each
Item D-751-5.4	Structure SD03 – per each
Item D-751-5.5	Structure SD04 – per each
Item D-751-5.6	Structure SD10 – per each
Item D-751-5.7	Structure SD11 – per each
Item D-751-5.8	Structure SD12 – per each
Item D-751-5.9	Structure SD12A – per each
Item D-751-5.10	Structure SD13 – per each
Item D-751-5.11	Structure SD14 – per each
Item D-751-5.12	Structure SD15 – per each
Item D-751-5.13	Structure SD16 – per each
Item D-751-5.14	Structure SD17 – per each
Item D-751-5.15	Structure SD18 – per each
Item D-751-5.16	Structure SD19 – per each
Item D-751-5.17	Structure SD20 – per each
Item D-751-5.18	Structure SD21 – per each
Item D-751-5.19	Structure SD22 – per each
Item D-751-5.20	Structure SD23 – per each
Item D-751-5.21	Structure SD23A – per each
Item D-751-5.22	Structure SD24 – per each
Item D-751-5.23	Structure SD25 – per each
Item D-751-5.24	Structure SD25A – per each
Item D-751-5.25	Structure SD25B – per each
Item D-751-5.26	Structure SD26 – per each
Item D-751-5.27	Structure SD27 – per each
Item D-751-5.28	Structure SD28 – per each
Item D-751-5.29	Structure SD29 – per each
Item D-751-5.30	Structure SD31 – per each
Item D-751-5.31	Structure SD32 – per each

Item D-751-5.32	Structure SD34 – per each
Item D-751-5.33	Structure SD35 – per each
Item D-751-5.34	Structure SD35A – per each
Item D-751-5.35	Structure SD36 – per each
Item D-751-5.36	Structure SD37 – per each
Item D-751-5.37	Structure SD40 – per each
Item D-751-5.38	Structure SD40A – per each
Item D-751-5.39	Structure SD41 – per each
Item D-751-5.40	Structure SD42 – per each
Item D-751-5.41	Structure SD43 – per each
Item D-751-5.42	Structure SD44 – per each
Item D-751-5.43	Structure SD45 – per each
Item D-751-5.44	Structure SD50 – per each
Item D-751-5.45	Structure SD51 – per each
Item D-751-5.46	Fabriform Revetment – per square yard

# MATERIAL REQUIREMENT

ASTM A27	Standard Specification for Steel Castings, Carbon, for General Application
ASTM A47	Standard Specification for Ferritic Malleable Iron Castings
ASTM A48	Standard Specification for Gray Iron Castings
ASTM A123	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A283	Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates
ASTM A536	Standard Specification for Ductile Iron Castings
ASTM A897	Standard Specification for Austempered Ductile Iron Castings
ASTM C32	Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)
ASTM C144	Standard Specification for Aggregate for Masonry Mortar
ASTM C150	Standard Specification for Portland Cement
ASTM C478	Standard Specification for Precast Reinforced Concrete Manhole Sections
ASTM C1433	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
AASHTO M36	Standard Specification for Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains

## END OF ITEM D-751

## ITEM D-752 CONCRETE CULVERTS, HEADWALLS & MISCELLANEOUS DRAINAGE STRUCTURES

#### DESCRIPTION

**752-1.1** This item shall consist of plain and reinforced concrete culverts, headwalls, *mitered end sections*, and miscellaneous drainage structures constructed in accordance with these specifications, at the specified locations and conforming to the lines, grades, and dimensions shown on the plans or required by the Engineer. *These items shall conform to the latest edition (English Units) of the State of Georgia Department of Transportation Design Standards for the Design, Construction, Maintenance and Utility Operations of the State Highway System (Topic No. 625-010-003) unless noted otherwise in the Project plans.* 

#### MATERIALS

752-2.1 Concrete. Plain and reinforced concrete shall meet the requirements of Item P-610.

#### **CONSTRUCTION METHODS**

#### 752-3.1 Unclassified excavation.

**a.** Trenches and foundation pits for structures or structure footings shall be excavated to the lines and grades and elevations shown on the plans. The excavation shall be of sufficient size to permit the placing of the full width and length of the structure or structure footings shown. The elevations of the bottoms of footings, as shown on the plans, shall be considered as approximate only; and the Engineer may approve, in writing, changes in dimensions or elevations of footings necessary to secure a satisfactory foundation.

**b.** Boulders, logs, or any other objectionable material encountered in excavation shall be removed. All rock or other hard foundation material shall be cleaned of all loose material and cut to a firm surface either level, stepped, or serrated, as directed by the Engineer. All seams or crevices shall be cleaned out and grouted. All loose and disintegrated rock and thin strata shall be removed. When concrete will rest on a surface other than rock, the bottom of the excavation shall not be disturbed and excavation to final grade shall not be made until immediately before the concrete or reinforcing steel is placed.

**c.** The Contractor shall do all bracing, sheathing, or shoring necessary to perform and protect the excavation and the structure as required for safety or conformance to governing laws. The cost of bracing, sheathing, or shoring shall be included in the unit price bid for excavation.

**d.** All bracing, sheathing, or shoring shall be removed by the Contractor after the completion of the structure. Removal shall be not disturb or damage the finished concrete. The cost of removal shall be included in the unit price bid for excavation.

**e.** After each excavation is completed, the Contractor shall notify the Engineer. No concrete or reinforcing steel shall be placed until the Engineer has approved the depth of the excavation and the character of the foundation material.

#### 752-3.2 Backfilling.

**a.** After a structure has been completed, backfilling with approved material shall be accomplished by applying the fill in horizontal layers not to exceed 8 inches (200 mm) in loose depth, and compacted. The field density of the compacted material shall be at least 90% of the maximum density for cohesive soils and 95% of the maximum density for non-cohesive soils. The maximum density shall be determined in accordance with ASTM D698 D1557. The field density shall be determined in accordance with ASTM direct transmission method.

**b.** No backfilling shall be placed against any structure until approved by the Engineer. For concrete, approval shall not be given until the concrete has been in place seven (7) days, or until tests establish that the concrete has attained sufficient strength to withstand any pressure created by the backfill or the placement methods.

**c.** Fill placed around concrete culverts shall be deposited on each side at the same time and to approximately the same elevation. All slopes bounding or within the areas to be backfilled shall be stepped or serrated to prevent wedge action against the structure.

**d.** Backfill will not be measured for direct payment. Performance of this work shall be considered as a subsidiary obligation of the Contractor, covered under the contract unit price for "unclassified excavation for structures."

**752-3.3 Weep holes.** Weep holes shall be constructed as shown on the plans.

**752-3.4 Cleaning and restoration of site.** After the backfill is completed, the Contractor shall dispose of all surplus material, dirt, and rubbish from the site. Surplus dirt may be deposited in embankment, shoulders, or as approved by the Engineer. The Contractor shall restore all disturbed areas to their original condition. The Contractor shall remove all tools and equipment, leaving the entire site free, clear, and in good condition.

752-3.5 CLEANING-OUT OF NEW AND EXISTING STRUCTURES. All new and existing structures are to be kept clear of debris and silt at all times during construction. After completion of all earthwork activities and the placement of all sod and/or seeding and mulching and before final acceptance, all new and existing drainage structures within the project work area including culverts, headwall, end wall and mitered end sections shall be cleaned of all silt, debris, etc. to the satisfaction of the Engineer. This may require the de-watering of the structures. Care must be taken during this operation so as not to damage the structures or the surrounding areas will be repair by the Contractor to the satisfaction of the Engineer at no additional payment.

#### METHOD OF MEASUREMENT

752-4.1 Mitered end sections and other miscellaneous drain structures shall be measured by the unit each.

752-4.2 NOT USED.

752-4.3 NOT USED.

#### **BASIS OF PAYMENT**

**752-5.1** Payment will be made at the contract unit price per *each*. These prices shall be full compensation for furnishing all materials and for all preparation, excavation, and placing the materials, and for all labor, equipment, tools, and incidentals necessary to complete the structure, *including any required backfill, bedding material or dewatering*.

Payment will be made under:

Reference Respective Structures Bid Under Item D-751.

#### **TESTING REQUIREMENTS**

ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft <sup>3</sup> (600 kN-m/m <sup>3</sup> ))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft <sup>3</sup> (2700 kN-m/m <sup>3</sup> ))
ASTM D 6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods

# END OF ITEM D-752

# DRAWINGS FOR BID

# SAVANNAH AIRPORT COMMISSION

Southeast Quadrant Stormwater Drainage Improvements SAC Job ID 30596

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS AC 150/5370-10H