

**ISSUED FOR BID**  
**CONTRACT DOCUMENTS AND SPECIFICATIONS**  
for  
**AIRPORT IMPROVEMENTS**  
**AVON PARK EXECUTIVE AIRPORT**  
Avon Park, Florida



**CITY OF AVON PARK BID # 05-15**  
**FDOT FM NO. 436411-1-94-01**  
**AHC PROJECT # 14060.02**

**TURN-KEY**  
**FUEL FARM**

**March 2015**

Prepared by:



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**SECTION 1**

**BIDDING & CONTRACT DOCUMENTS**

**INVITATION TO BID**  
**TURN-KEY FUEL FARM**  
**AT THE AVON PARK EXECUTIVE AIRPORT**

**MARCH 16, 2015**

**BID NO. 05-15**

Sealed bids will be received by the City of Avon Park, Florida, 110 East Main Street, Avon Park, Florida 33825 ATTENTION: Maria Sutherland, Administrative Services Director, **2:00 P.M., APRIL 14, 2015.** Bids received after this specified time and date will not be considered. The sealed bids will be publicly opened and read aloud on the same date and time in the City Manager's Conference Room for the following:

**Bid Documents may be requested by contacting:** AmHerst Consulting Company, LLC, @ (407) 480-3553, on or after March 16, 2015.

**THIS INVITATION TO BID IS SEEKING THE SERVICES OF A QUALIFIED, LICENSED AND EXPERIENCED CONTRACTOR TO PROVIDE ALL REQUIRED DESIGN, ADMINISTRATION, MATERIALS, TOOLS, PERMITS, EQUIPMENT, LABOR AND SUPERVISION FOR THE FABRICATING AND INSTALLATION OF TWO (2) 12,000 GALLON ABOVE GROUND, DOUBLE WALL, STEEL TANKS WITH INTEGRAL FUEL TRANSFER EQUIPMENT, WITH A POINT OF SALE SELF-SERVE TERMINAL CAPABLE OF ACCEPTING CREDIT CARDS FOR THE SALE OF RETAIL JET-A AND AVGAS FUEL TO INCLUDE THE NECESSARY CONCRETE PAD TO SUPPORT THE FUEL FARM. ALL ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE STATE, BUILDING CODES, HEALTH DEPARTMENT, COUNTY AND LOCAL STANDARDS. THE BIDS SUBMITTED AND THE CONTRACT, IF AWARDED, SHALL BE IN COMPLETE ACCORDANCE WITH, WITHOUT LIMITATION, THIS INVITATION TO BID, AMHERST CONSULTING COMPANY, LLC PLANS AND SPECIFICATIONS, ALL CODES, REQUIREMENTS AND REGULATIONS REFERENCED THEREIN.**

**Note: A Mandatory Pre-Bid Meeting has been scheduled for 10:00 A.M., March 31, 2015 at the Avon Park Executive Airport Terminal Building Conference Room, 1545 State Route 64, Avon Park, Florida 33825.**

Questions regarding this invitation to bid should be **in writing** and should reference the above Bid number. Submit all questions to **Ms. Maria Sutherland, Administrative Services Director**, via e-mail at [sutherland@avonpark.cc](mailto:sutherland@avonpark.cc) or fax (863) 452-4413.

**CLARIFICATION OF DOCUMENTATION**

Bidders requiring clarification or having a dispute with these documents must advise **Ms. Maria Sutherland, Administrative Services Director**, the nature of the required clarification or basis of the dispute, in writing, no later than **5 p.m. local time April 7, 2015**. If no written contact has been made by this specified date the Bidder waives the right to any future consideration and accepts the documents as published and/or revised by the City. **Note:** Any use of brand names (manufacturer) in this invitation and specification is for Bidder

**BIDDING DOCUMENTS** will be available in electronic PDF format via email at no cost **on or after DATE**. Bidders shall request the Bidding Documents via email from the City's designated point-of-contact below:

**AmHerst Consulting Company, LLC**  
**1000 Legion Place, Suite 1285**  
**Orlando, FL 32801**

**Attn:** Wes Teel  
**Telephone:** (407) 480-3553  
**Fax:** (407) 781-5415  
**Email:** [wes.teel@amherst-consulting.com](mailto:wes.teel@amherst-consulting.com)

Requests for copies of a **Plan Holder's List** shall be forwarded via email correspondence to the attention of AmHerst Consulting Company, LLC, to the point-of-contact above.

**BIDDING DOCUMENTS for Review Only:**

City of Avon Park  
110 East Main Street, Avon Park, Florida 33825

AmHerst Consulting Company, LLC  
1000 Legion Place, Suite 1285  
Orlando, FL 32801

**FLORIDA PUBLIC RECORDS LAW**

Bidder's submittal information shall be subject to Chapter 119, Florida Statutes, generally known as the "Florida Public Records Law." This statute provides that all documents, papers, records and similar material produced or received by an agency or political subdivision of the State are subject to public inspection and review under reasonable conditions and at reasonable times. Accordingly, unless specifically exempted by law, all bids and materials received with bids, marketing information, quotations, proposals, specifications, correspondence, forms, contracts, bonds, financial statements, prospectus, corporate resumes, product summaries, lab reports, inspection and test reports and any other such material will be considered a matter of public record. The City and its staff cannot regard any document, information or data as proprietary or confidential unless so advised by the City Attorney.

Additionally, should a Contractor enter into an Agreement with the City, the Contractor shall comply with Florida Statute Chapter 119, the Florida Public Records Act as it relates to records kept and maintained by Contractor in performance of services pursuant to this Agreement. In accordance with Florida Statute § 119.0701, Contractor shall be required to provide public access to such records at a cost that does not exceed the statutory requirements or as otherwise provided by law. In the event any such records are exempt or confidential from public records disclosure Contractor shall ensure that those records are not disclosed except as authorized by law. Contractor shall meet all requirements for retaining public records and shall transfer at no cost to the City, all public records in possession of the Contractor upon termination of the Agreement and destroy duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the City in a format that is compatible with the information technology system of the City.

### **EXPARTE COMMUNICATION**

Please note that to insure the proper and fair evaluation of a bid, the City of Avon Park prohibits exparte communication (i.e., unsolicited) initiated by the Bidder to the City Official or Employee evaluating or considering the bids prior to the time a bid decision has been made. Communication between Bidder and the City will be initiated by the appropriate City Official or Employee in order to obtain information or clarification needed to develop a proper and accurate evaluation of the bid. Exparte communication may be grounds for disqualifying the offending Bidder from consideration or award of the bid, then in evaluation, or any future bid.

### **BONDING**

A certified check or bid bond shall accompany each bid. The certified check or bid bond shall be for an amount not less than five percent (5%) of the bid price and shall be made payable to the Owner as a guarantee that the Bidder will not withdraw for a period of One Hundred Twenty (120) days after bid closing time.

In the event the contract is awarded to the Bidder, he/she will, within ten (10) days thereafter, enter into a written contract with the City of Avon Park. The successful Bidder shall also furnish within ten (10) days a **PUBLIC CONSTRUCTION BOND IN COMPLETE ACCORDANCE WITH SECTION 255.05 OF THE FLORIDA STATUTES** in an amount equal to the contract price, as a guarantee of good faith that the Bidder will execute the work in accordance with the terms of the contract and that the Bidder shall make payments for all labor, material and supplies used directly or indirectly for the work. Failure to do so will constitute forfeiture of the bid security as liquidated damages.

The Public Construction Bond shall be secured from and countersigned by an agency of a surety company recognized in good standing, licensed and authorized to do business in the State of Florida and found to be acceptable to the City of Avon Park.

### **INSURANCE AND SAFETY REQUIREMENTS**

All insurance shall be secured from or countersigned by an agent or Surety Company recognized in good standing and authorized to do business in the State of Florida.

**The Contractor shall, within ten (10) days of notification of award and prior to commencement of work, take out and maintain in full force and effect minimum insurance coverage as specified in the attached requirements.** This insurance shall remain in force and effect throughout the duration of the contract.

A **certificate of existing insurance** coverage should be submitted with the bid as proof of insurability. If the current coverage does not meet the bid requirements then the Bidder should request an affidavit of insurability from the Bidder's insurance agent certifying the requirements can and will be met. Failure to provide adequate insurance coverage may be cause for disqualification as non-responsive to the bid requirements.

The Contractor agrees to accept and abide by the City of Avon Park safety regulations in complete accordance with the attached requirements.

### **INDEMNIFICATION AGREEMENT**

The Contractor agrees to indemnify and hold harmless the City of Avon Park in complete accordance with the attached requirements. This agreement shall be signed, notarized and returned with the bid submittal. Failure to provide the Hold Harmless Indemnification Agreement may be cause for disqualification as non-responsive to the bid requirements.

## **TERMS AND CONDITIONS OF AGREEMENT**

A sample of an agreement to be entered into with the successful bidder is included with this bid as Attachment "A", should the City require such.

## **PUBLIC ENTITY CRIMES**

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for **CATEGORY TWO** for a period of 36 months from the date of being placed on the convicted vendor list.

## **DRUG-FREE WORKPLACE CERTIFICATION**

By submitting a bid in response to this Invitation to Bid, you are certifying that your company is a drug-free workplace in accordance with Florida Statute 287.087.

## **CONFLICT OF INTEREST / STATEMENT OF NON-COLLUSION**

The award hereunder is subject to Chapter 112, Florida Statutes. All respondents must disclose with their bid the name of any officer, director, or agent who is also an employee of the City of Avon Park. Further, all respondents must disclose the name of any City of Avon Park employee who owns, directly or indirectly, an interest of five percent (5%) or more of the respondent's firm or any of its branches.

The respondent shall certify that he/she has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the bid and that the respondent is not financially interested in, or otherwise affiliated in a business way with any other respondent on the same land or improvements.

## **ADDENDA**

It is the Bidder's responsibility to contact the City of Avon Park prior to submitting a bid to ascertain if any addenda have been issued, to obtain all such addenda and return executed addenda with the bid.

The failure of a Bidder to submit acknowledgement of any addenda that affects the bid price(s) may be considered an irregularity and may be cause for rejection of the bid.

## **BID SUBMITTAL**

**An original and one (1) copy (collated in sets)** of the bid form supplied by the City of Avon Park and all required bid submittal data including any Bidder's specifications, drawings, etc., shall be enclosed within a sealed envelope with the words, "**SEALED BID NO. 05-15 TURN-KEY FUEL FARM**" and the Bidder's name and address clearly shown on the outside thereof. **Submittals received with less than two (2) total copies or not submitted on the City of Avon Park Bid Sheets may be disqualified as non-responsive.**

Mailed bids must be received at 110 East Main Street, Avon Park, Florida 33825 ATTENTION: Maria Sutherland, Administrative Services Director, not later than the time set forth for bid opening. The City of Avon Park, Florida will **not** be responsible for any lost or late arriving bids sent via the U.S. Postal Service or other delivery services.

**The City of Avon Park at its sole discretion reserves the right to waive technicalities or irregularities, to reject any or all bids, and/or to accept that bid which is in the best interest of the City.** The award of this bid, if made, may be based on considerations other than total cost and may be awarded based on various considerations, including without limitation; Bidder's experience and/or qualifications, past experience, administrative cost, standardization, technical evaluation and oral and/or written presentations as required. The City reserves the right to accept all or part, or to decline the whole, and to award this bid to one (1) Bidder. There is no obligation to buy. The bid, if awarded, will be in the judgment of the City the most responsive to the City's needs. The City of Avon Park encourages the use of minority and women-owned businesses as subcontractors or in joint venture arrangements.

City of Avon Park, Florida



Maria Sutherland  
Administrative Services Director

Attach.

Cc: Wes Teel, AmHerst Consulting Company, LLC  
File



**CITY OF AVON PARK**

**BID FORM**

TO: City of Avon Park  
Attn: Ms. Maria Sutherland  
110 East Main Street  
Avon Park, Florida 33825

1. The undersigned, as Bidder, does hereby declare that having familiarized himself with the local conditions affecting the cost of the work, contract documents including the "Invitation to Bid", "Instructions to Bidders", "Bid" and "Bid Schedule", "General Provisions", "Special Provisions", the Technical Specifications contained in the Product Documents and drawings and other related construction documents prepared by AmHerst Consulting and titled:

**Avon Park Executive Airport  
TURN-KEY FUEL FARM  
FDOT FM No. 436411-1-94-01  
City of Avon Park Bid No. 05-15**

dated February 2015, together with any Addenda to such construction documents as listed herein (Paragraph 12), hereby proposes to furnish all materials, equipment, tools, incidentals and other means of construction and perform all work required in strict accordance with the provisions of documents noted above for the consideration of prices quoted herein.

The undersigned understands that the quantities shown in the "Bid Schedule" are approximate only and are intended principally to serve as a guide in evaluating bids, and are subject to either increase or decrease and that all quantities of work, whether increased or decreased, are to be performed at the unit prices stated in the Bid Schedule.

2. The undersigned affirms that in making such bid, neither he nor any company that he may represent, nor anyone in 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 bid 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.
3. The undersigned, when notified of the acceptance of this Bid, does hereby agree to enter into a written contract with the City of Avon Park, or accept a City of Avon Park purchase order. The successful Bidder shall also furnish within ten (10) days a PUBLIC CONSTRUCTION BOND IN COMPLETE ACCORDANCE WITH SECTION 255.05 OF THE FLORIDA STATUTES in an amount equal to the contract price, as a guarantee of good faith that the Bidder will execute the work in accordance with the terms of the contract and that the Bidder shall make payments for all labor, material and supplies used directly or indirectly for the work. Failure to do so will constitute forfeiture of the bid security as liquidated damages.

The Public Construction Bond shall be secured from and countersigned by an agency of a surety company recognized in good standing, licensed and authorized to do business in the State of Florida and found to be acceptable to the City of Avon Park.

4. 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 these specifications 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 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 are not a penalty, but represent the parties' estimate of the actual damages which the Owner would suffer per day if the work is not completed as scheduled.

5. In submitting this bid, it is understood that the right is reserved by the Owner to waive irregularities and informalities 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 the period of time stipulated in the Invitation to Bid after the opening thereof.
6. The undersigned affirms that he has completed, signed and included in his Bid the "receipt of addenda", Equal Opportunity Report Statement", "Disadvantaged Business Enterprise Assurance", Bidder's Qualifications", "Bid Conditions" and "Bid Schedule". 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 regarding his own employment policies and practices as well as those of his proposed sub-contractors as the FDOT, the Owner, or Secretary of Labor may require.

The bidder shall furnish similar statements executed by each of his first-tier and second-tier sub-contractors whose contracts equal TEN THOUSAND DOLLARS (\$10,000.00) U.S. or more and shall obtain similar compliance by such sub-contractors before awarding such sub-contracts. No sub-contract shall be awarded to any noncomplying sub-contractor.

7. It is understood and agreed that all workmanship and materials under all items of work are guaranteed for one year from the date of final acceptance, unless otherwise specified.
8. The undersigned affirms that he has completed all of the blank spaces in all "Bid Schedules" with an amount in words and numbers and agrees that where a discrepancy occurs between the prices quoted in words and in numbers, the written words shall take precedence and govern when determining final costs or award of contract.

9. The undersigned agrees that the contract total amount 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 applicable unit price shown on the unit price "Bid Schedule".
10. 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, were used in the preparation of this bid.
11. The undersigned attaches hereto a certified check, cashier's check, treasurer's check, bank draft on any national or state bank, or Bid Bond in the sum of 5% of amount bid payable to the City of Avon Park as required in the Invitation to Bid, and the undersigned agrees that in case he fails to fulfill his obligations under the foregoing Bid and Contract, the City of Avon Park 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 check 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.
12. The undersigned acknowledges receipt of the following Addenda:

Addendum No.	Date
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

13. Bid Schedule. For all work required in accordance with the applicable plans, specifications and other contract documents, including the cost of the required bonds and insurance, the undersigned submits a total bid breakdown by the unit prices as shown in the Bid Schedule - Unit Prices.
14. The legal status of the undersigned is:
- a. A corporation duly organized and doing business under the laws of the State of \_\_\_\_\_, for whom, \_\_\_\_\_, bearing official title of \_\_\_\_\_, whose signature is affixed to this bid, is duly authorized to execute contracts.
- If foreign corporation: date of qualification in (state): \_\_\_\_\_  
Name and address of processing agent: \_\_\_\_\_  
\_\_\_\_\_
- b. A partnership, all of the members of which, with addresses are: (designate general partners as such).
- If all partners are non-residents of \_\_\_\_\_ (state), designate name and address of agent for service of process located in \_\_\_\_\_ (state)

- c. An individual, whose signature is affixed to this bid. (if non-resident of \_\_\_\_\_ (state), resident agent for the service of process must be designated.) \_\_\_\_\_

The bidder shall fill out the appropriate form (a., b., or c.) and strike out the other two.

15. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion: The bidder/offerer certifies by submission of this bid or acceptance of this contract that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal, State of Florida or City of Avon Park, department or agency. It further agrees by submitting this bid that it will include this clause without modification in all lower tier transactions, solicitations, bids, contracts and sub-contracts. Where the bidder/offerer/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/bid.
16. The Bidder is advised that award of Contract(s) is subject to receipt of Florida Department of Transportation (FDOT) funding.
17. Public Entity Crimes: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Florida Statute 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

The Owner reserves the right to modify or delete various items listed in the Bid Schedule in order to make use of all available funding. Such modifications shall be made solely at the Owners discretion.

Dated and signed at \_\_\_\_\_, \_\_\_\_\_, this \_\_\_ day of \_\_\_\_\_, 2015.

(Name of Bidder) \_\_\_\_\_

(Authorized Signature) \_\_\_\_\_

(Title) \_\_\_\_\_

(Mailing Address) \_\_\_\_\_

(City, State, Zip) \_\_\_\_\_

Florida Contractor License No. \_\_\_\_\_

**BID SHEET AND BID SCHEDULE**

**AVON PARK EXECUTIVE AIRPORT  
TURN-KEY FUEL FARM**

**FDOT FM NO. 436411-1-94-01  
City of Avon Park Bid Number 05-15**

This Bid shall remain valid for a period of ONE HUNDRED TWENTY (120) days from the date of the Bid Opening.

(Name of Bidder) \_\_\_\_\_

(Mailing Address) \_\_\_\_\_

(City, State, Zip) \_\_\_\_\_

Florida Contractor License No. \_\_\_\_\_

The following bid is in strict accordance with the City of Avon Park Invitation to Bid No. 05-15 and all references made therein.

**TURN-KEY FUEL FARM**  
**BID SHEET AND BID SCHEDULE**

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

Airport Name: AVON PARK EXECUTIVE AIRPORT  
FDOT FM No.: 436411-1-94-01  
City Bid No.: 05-15  
Project Description: TURN KEY FUEL FARM

<u>Specification Reference</u>	<u>Item Description</u>	<u>Unit</u>	<u>Quantity</u>
AST-101-1	Turn Key Fuel Farm	LS	1

The work to be performed shall consist of a **DESIGN-BUILD** project for the fabricating, delivering, installing, connecting, and testing two (2) each 12,000 gallon above-ground double-wall steel tanks with self-contained, integral fuel transfer equipment, as described herein and on the drawings. The tanks will provide for a self-serve pump, hose and reel system that can be plugged into the same Point-of-Sale device. This item shall also include one (1) self-service, Point-of-Sale payment terminal to serve both the Jet-A and Avgas tanks. The ladder and platform assembly is considered to be an integral part of the assembly. The tank assemblies will be installed on a concrete slab to be constructed for this fuel farm. Additional work includes installing underground electrical and telephone lines to the fuel tank site, and all required electrical work.

The work shall include all painted coatings, signs, and labels. It shall include all equipment, installation, accessories, start-up, testing, training, and incidentals required for a complete and functional installation, other the external electrical work, and fire extinguishers and fuel for start-up and testing which will be furnished by the Owner. This is a turn-key project and the fuel farm shall be fully functional and operational at the completion of the project.

**TOTAL FIRM LUMP SUM BID:**

**Total Bid Lump Sum Price, written in numbers: \$** \_\_\_\_\_

**Total Bid Lump Sum Price, written in words:** \_\_\_\_\_

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

**LIST ALL ANTICIPATED PRIMARY SUBCONTRACTORS:**

<b>SUBCONTRACTOR NAME</b>	<b>ADDRESS &amp; PHONE</b>	<b>TRADE/ CRAFT</b>
_____	_____ _____ _____	_____

Attach additional sheets as necessary

**REQUIRED BID INFORMATION:**

As a responsive bidder, the bidder has attached all required data including qualification information, certifications, etc. as requested in the project documents:

YES \_\_\_\_\_ NO \_\_\_\_\_

If NO is checked, please explain.

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**EXCEPTIONS OR CLARIFICATIONS:**

List any and all exceptions or clarifications to this bid or the referenced specification. Do you have any exceptions or clarifications to this bid?

YES \_\_\_\_\_ NO \_\_\_\_\_

If YES is checked, please explain.

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## **INSTRUCTIONS TO BIDDERS**

### I. GENERAL

- A. This project is to be financed in part by a Grant from the State of Florida, (FDOT FM No. 436411-1-94-01). Award of Contract is subject to the approval of the FDOT and the City of Avon Park.
- B. Non-Discrimination and Non-Segregated Facilities
- (1) Bidders must comply with the President's Executive Order No. 11246, which prohibits discrimination in employment regarding race, creed, color, sex or national origin.
  - (2) Each bidder shall complete, sign and include in his bid 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 sub-contractors as the FDOT, the Sponsor, or the Secretary of Labor may require. All such information required of a sub-contractor 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 sub-contracts entered into by the Contractor. Sub-contracts entered into by the Contractor shall also include all other applicable labor provisions. No sub-contract shall be awarded to a non-complying sub-contractor.
  - (4) In addition, the Contractor will also insert in each of his sub-contracts a clause requiring the sub-contractor to include these provisions in any lower tier sub-contracts which they may enter into, together with a clause requiring this insertion in any further sub-contracts that may in turn be made.
- C. Compliance with Law
- (1) Bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act and the Contract Work Hours Standard Act.
  - (2) Bidders must comply with all State laws, local ordinances, except that any preferential consideration of local in-state bidders is not allowed.

D. General Bond Requirements

- (1) The bid security shall be as specified.
- (2) Public Construction Bonds shall be as specified.

E. Insurance requirements shall be as specified in the Special Provisions.

II. EXAMINATION OF CONDITIONS AFFECTING WORK

A. Prior to submitting a Bid, 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 work. Bidders shall ask the Engineer for any additional information deemed necessary for them to be fully informed as to exactly what is to be expected prior to submitting a Bid. 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 Bidder of the necessity for fully informing himself as to existing physical conditions.

Bidders are advised that attendance at the Pre-Bid Conference (date and time stated in Invitation to Bid) is not mandatory for those contractors bidding as Prime Contractors. The attendance of Subcontractors is not mandatory.

Contact Person:

Avon Park Executive Airport  
Jason Lister, Public Safety Director  
1535 State Road 64 West, Suite 101  
Avon Park, FL 33825  
(863) 453-6622 (Phone)  
(863) 453-3558 (Fax)

AmHerst Consulting Company, LLC  
Mr. Wes Teel, Project Manager  
1000 Legion Place, Suite 1285  
Orlando, FL 32801  
(407) 480-3553 (Phone)  
(407) 781-5415 (Fax)

B. When soils/boring data is provided in the Contract Documents, the Contractor shall assume responsibility for any conclusions he may draw from such data. He may employ his own consultants to analyze available information and shall be responsible for any conclusions drawn from that information.

III. BIDS

- A. Sealed Bids for the construction of the project generally described will be received until the time and the date stated in the "Invitation to Bid".
- B. The Bid shall be on the "Bid Form" provided, no other form is acceptable.
- C. Due to the allocation of funds from funding agencies, successful bidders may be required to provide verified breakdown of costs of work in a manner acceptable to the Owner and the "funding agencies".
- D. Each Bidder shall present his Bid in complete accordance with the Bid Submittal Instructions as stated in the Invitation to Bid.

The envelope shall contain a reproduced copy of the following items from this document which the Bidder shall complete and sign.

Section

B.....	Bid Form
INS .....	Instructions to Bidders
BC .....	Bid Conditions - DBE
BF1 .....	Prime Bidder's Qualifications
BF2.....	Equal Employment Opportunity Statement
BF3.....	Certification of Non-Segregated Facilities
BF4.....	Disadvantaged Business Enterprise Eligibility (if applicable)
BF5-1,2 & 3.....	Joint Venture Eligibility (if applicable)
BF5-4 & 5 .....	DBE Subcontractor Identification Affidavit/Letter of Intent to Perform as a Subcontractor
FB6-1.....	Schedule of DBE Participation
BF6-2.....	DBE Unavailability Certification (if applicable)
BB.....	Bid Bond or Certified Check
SA.....	Statement of Assurance of Compliance with OSHA Excavation Standards and the Florida Trench Safety Act
NCA-1 .....	Non-Collusive Affidavit
SP8.....	City of Avon Park Insurance Requirements

IV. PREPARATION AND SUBMISSION OF BIDS

- A. Bids shall be submitted as indicated by the "Bid Form" and shall be signed in ink by an official of the firm submitting the bid.
- B. Erasures or other changes in a bid shall be explained or noted over the signature of the bidder.
- C. Bids 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.
- D. Each bid shall indicate the full business name and address of the bidder and shall be signed by him with the usual signature.

- E. A bid 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.
- F. A bid 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 bid shall be typed or printed below the signature.
- G. When requested by the Owner, a Power of Attorney or other satisfactory evidence of the authority of the officer signing in behalf of the Corporation shall be furnished for the Owner's records.
- H. The bid must be accompanied by a Bid Bond or a Certified Check payable to the Owner in an amount equal to but 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 Public Construction bond 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.

V. INTERPRETATIONS

- A. Each Bidder shall carefully examine the plans and the Contract Documents and all addenda or other revisions and thoroughly familiarize himself with the detailed requirements prior to submitting a Bid. Should a Bidder find discrepancies or ambiguities in, or omission from Bid 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 Engineer who will send written addenda to all bidders. All inquiries shall be directed to the Engineer. The Engineer will not be responsible for any oral instructions. All addenda sent to bidders will become a part of the Contract Documents.
- B. Each bidder is invited to visit the site of the proposed construction. A tour of the site is planned after the Pre-Bid Conference. Any other visit to the site is to be coordinated with and at the direction of the City of Avon Park. AT NO TIME is the prospective bidder to enter the proposed construction site without the express consent of the Owner.
- C. Acknowledgment of receipt of all addenda shall be made by each bidder in the space provided in the Bid Form, Section B, Paragraph 12.

VI. MODIFICATIONS AND/OR WITHDRAWAL OF BIDS

- A. Bids which have been submitted may not be modified or withdrawn after submission unless the bidder makes his request by letter or telegram or in person and such request is received prior to the time and date fixed for the opening of bids.
- B. Negligence on the part of the bidder in the preparation of his Bid shall not be grounds for the modification or withdrawal of a Bid after the time set for bid opening.

VII. REJECTION OF BIDS

- A. The Owner reserves the right to reject any or all bids and to waive any informalities or irregularities therein or to award or refrain from awarding a Contract for the work.

VIII. COMPLETION OF BID

- A. The bidder is required to fill in all the blank spaces on the Bid and all of the unit prices on the Bid unit price "Bid Schedule".
- B. Where a discrepancy occurs between the prices quoted in words and in numbers, the words shall take precedence and govern in determining final costs of or award of Contract.

IX. DISADVANTAGED BUSINESS ENTERPRISE

- A. Although a DBE goal is not established for this contract the bidder shall make a "good faith effort" to utilize DBE firms. Bidders must provide the Owner with written statements as to the reasons DBE firms were not utilized.

X. NOTICE AND SERVICE THEREOF

All notices given by the Owner, Owner's Authorized Representative or the Architect/Engineer under the provisions of the Contract Documents shall be in writing and service of same may be by either of the following methods:

1. By delivery of the notice to the bidder or to any officer of the bidder if bidder is a corporation or to any agent of the bidder.
2. By mailing the notice by United States mail to the address of the bidder shown on the bid.

Notices given by the Owner or Architect/Engineer shall be effective upon mailing, if mailed.

XI. FLORIDA SALES AND OTHER TAXES

Work under this contract is subject to the provisions of Chapter 212, Florida Statutes, Tax on Sales, Use and Other Transactions. Other state, local or federal taxes may be

applicable. The bidder is responsible to remit to the appropriate governmental entity all applicable taxes. Any applicable tax shall be included in the total bid price by the bidder.

## XII. GUARANTY OF FAITHFUL PERFORMANCE AND PAYMENT

A Public Construction Bond in complete accordance with F.S. 255.05 and satisfactory to the Owner each in an initial amount of not less than the Total Contract Price, will be required of the successful bidder for, among others, the following purposes:

1. To guarantee faithful performance of the requirements of the Contract Documents, including all applicable warranties.
2. To guarantee the payment of all labor, materials or supplies used directly or indirectly in the prosecution of the work provided for in the contract.

The penal sum of the Public Construction Bond shall be increased or decreased during the course of the work in the event that modifications, change orders or addenda increase or decrease the total contract price so that the penal sum of each bond shall be in an amount equal to the completed contract price at the completion of the work.

The bond shall be written through a licensed Florida agency on behalf of a surety company licensed to do business in the State of Florida meeting the following requirements:

1. Qualification - Management and Strength: The surety must be rated no less than "A" as to management and no less than XII as to strength by the latest edition of Best's Insurance Guide, published by A.M. Best Company, P.O. Box 1107, Summit, New Jersey, 07901.
2. Bonding Limit - Any One Risk: The bonding limit of the sureties shall not exceed five percent (5%) of the policyholder surplus (capital and surplus) as listed by the aforementioned Best's Insurance Guide.

The completed bonds shall be delivered to the Owner with the executed contract as required hereinafter in these Instructions to Bidders.

## XIII. POWER-OF-ATTORNEY AND COUNTERSIGNATURE

Attorneys-in-fact who sign Bid Bonds, Performance Bonds and Payment Bonds must file with such bonds a certified copy of their Power-of-Attorney to sign the bonds. All bonds must be countersigned by a resident Florida agent of the surety with proof of agency attached.

## XIV. CONTRACTOR OBLIGATIONS

The Contractor shall, in a good workmanship manner, perform all work and furnish all labor, tools, materials, equipment and services except as herein otherwise expressly set forth, necessary to perform and complete all the work required by this contract, within a logical time frame (on a continuous basis) in accordance with the provisions of the

specification. The successful Contractor shall also be responsible for obtaining and the cost of any and all required permitting and licenses.

XV. SUBCONTRACTORS

The successful bidder shall obtain prior consent of the Owner in writing before entering into subcontracts for any part of the work.

XVI. FOREIGN TRADE CERTIFICATION

The contractor or subcontractor by submission of an offer and/or execution of a contract, certifies that it:

1. is not owned or controlled by one or more citizens or nationals of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR).
2. has not knowingly entered into any contract or sub-contract for this project with a contractor that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list.
3. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

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 a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or sub-contracts for the supply of any product or service of a foreign country on the said list for use on the project, the Florida Department of Transportation may direct, through the Owner, cancellation of the contract at no cost to the state.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier sub-contracts. The contractor may rely upon the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the Owner if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The sub-contractor agrees to provide immediate written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstance.

This certification is a material representation of facts upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the FDOT may direct, through the Owner, cancellation of the contract or subcontract for default at no cost to the state.

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.

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, United States Code, Section 1001.

XVII. BUY AMERICAN - STEEL & MANUFACTURED PRODUCTS FOR CONSTRUCTION CONTRACTS

A. The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States. The following terms apply:

1. Steel and Manufactured Products. As used in this clause, steel and manufactured products include (1) steel 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% of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in sub-paragraphs B.1 or 2. shall be treated as domestic.
2. Components. As used in this clause, components means those articles, materials and supplies incorporated directly into steel and manufactured products.
3. Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

B. The successful bidder will be required to assure that only domestic steel and manufactured products will be used by the contractor, subcontractors, material men and suppliers in the performance of this contract except those

1. that the U.S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality;
2. that the U.S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or
3. that inclusion of domestic material will increase the cost of the overall project contract by more than 25%.

XVIII. BUY AMERICAN CERTIFICATE

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

<u>Product</u>	<u>Origin Country of</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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## **BID CONDITIONS**

### **DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

The following bid conditions apply to this Florida Department of Transportation (FDOT) assisted Contract. Submission of a bid by a prospective Contractor shall constitute full acceptance of these bid conditions.

1. **Definition.** Disadvantaged Business Enterprise (DBE) as used in this Contract shall have the same meaning as defined in paragraph 23.62 of Sub-part D to 49 CFR Part 23.
2. **Policy.** Disadvantaged business enterprises shall have the maximum opportunity to participate in the performance of Contracts and subcontracts financed in whole or in part with state funds.
3. **DBE Participation.** The contractor agrees to ensure that disadvantaged business enterprises have the maximum opportunity to participate in the performance of Contracts and subcontracts financed in whole or in part with state funds. In this regard, all Contractors shall take all necessary and reasonable steps to ensure that disadvantaged business enterprises have the maximum opportunity to compete for and perform Contracts. Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of FDOT-assisted Contracts.
4. **Compliance.** All bidders, potential Contractors or subcontractors for this FDOT-assisted Contract are hereby notified that failure to make a good faith effort to procure DBE participation, as set forth above, shall constitute a breach of Contract which may result in termination of the Contract or such other remedy as deemed appropriate by the Owner.
6. **Subcontract Clauses.** All bidders and potential Contractors hereby assure that they will include the above requirements in all subcontracts which offer further subcontracting opportunities.
7. **Contract Award.** Bidders are hereby advised that making an acceptable good faith effort to allow for the participation of disadvantaged business enterprises is a condition of being awarded this FDOT-assisted Contract.

The Owner proposes to award the Contract to the lowest responsive and responsible bidder submitting a reasonable bid provided he has made an acceptable good faith effort to allow for the participation of disadvantaged business enterprises. Bidder is advised that the Owner has sole authority to determine if the bidder has made sufficient effort toward disadvantaged business enterprise participation to qualify for Contract award. The Owner reserves the right to reject any or all bids submitted.

8. DBE Participation Goal. A specific DBE goal has not been established for this contract. However, a “good faith effort” will be made to procure maximum DBE participation.

Available DBE's. The Florida Department of Transportation has on file a DBE Directory which contains a list of all DBE firms certified to perform construction activities in the State of Florida. Bidders must refer to the latest DBE Directory. Bidders are encouraged to inspect this Directory to assist in locating DBE's for the work.

9. Contractor's Required Submission. The Owner requires the submission of the following information with the bid. Certain other DBE information may also be required.

**DISADVANTAGED BUSINESS ENTERPRISE SUBCONTRACTS**

(Attach Additional Pages as Necessary)

<b>MBE Subcontractors Name/Address/Identity*</b>	<b>Dollar Value of Sub Work Item</b>	<b>Subcontract Work Type</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**WOMEN SUBCONTRACTS**

<b>Women Subcontractors Name/Address/Identity*</b>	<b>Dollar Value of Sub Work Item</b>	<b>Subcontract Work Type</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**OTHER DISADVANTAGED SUBCONTRACTS**

<b>Other Subcontractors Name/Address/Identity*</b>	<b>Dollar Value of Sub Work Item</b>	<b>Subcontract Work Type</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total Dollar Value of Subcontract Work: \$ \_\_\_\_\_

Total Dollar Value of Base Bid : \$ \_\_\_\_\_

Total DBE Percent Base Bid : \_\_\_\_\_%

\* Contractor must fill in the identity of the DBE Subcontractor, i.e., Black, Hispanic, Asian American, American Indian and other economically disadvantaged.

10. DBE Good Faith Effort

The contractor shall submit the DBE Unavailability Certification **with the bid** to assist the Owner in determining whether or not the contractor made acceptable good faith efforts.

Suggested guidance for use in determining if good faith efforts were made by a contractor are included in Appendix "A" to 49 CFR Part 23, Subpart 23.45(h).

A list of the efforts that a contractor may make and the Owner may use in making a determination as to the acceptability of a contractor's efforts to meet the goals follows:

1. Whether the Contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the recipient to inform DBE's of contracting and subcontracting opportunities;
2. Whether the contractor advertised in general circulation, trade association, and disadvantaged-focus media concerning the subcontracting opportunities;
3. Whether the contractor provided written notice to a reasonable number of specific DBE's that their interest in the contract was being solicited, in sufficient time to allow the DBE's to participate effectively;
4. Whether contractor followed up initial solicitations of interest by contacting DBE's to determine with certainty whether the DBE's were interested;
5. Whether the contractor selected portions of work to be performed by DBE's in order to increase the likelihood of meeting the DBE goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation);
6. Whether the contractor provided interested DBE's with adequate information about the plans, specifications and requirements of the contract;
7. Whether the contractor negotiated in good faith with interested DBE's, not rejecting DBE's as unqualified without sound reasons based on a thorough investigation of their capabilities;
8. Whether the contractor made efforts to assist interested DBE's in obtaining bonding, lines of credit, or insurance required by the recipient or contractor; and
9. Whether the contractor made a good faith effort to utilize the services of available

disadvantaged community organizations; disadvantaged contractors' groups; local and state disadvantaged business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBE's.

NOTE: The nine (9) items set forth above are merely suggested criteria and the owner may specify that you submit information on certain other actions a contractor took to secure DBE participation. A contractor may also submit to the owner other information on efforts made to secure participation.

10. Contractor's Assurance. The bidder hereby assures that he will meet one (1) of the following as appropriate:

- a) The DBE participation as established in Paragraph 8. above.
- b) The DBE participation as shown in Paragraph 9. above.
- c) The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than thirty (30) days from the receipt of each payment the prime contractor receives from The City of Avon Park. The prime contractor agrees further to return retainage payments to each subcontractor within thirty (30) 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 City of Avon Park. This clause applies to both DBE and non-DBE subcontractors.

Agreements between bidder/proposer and a DBE in which the DBE promises not to provide subcontracting quotations to other bidders/proposers are prohibited. The bidder shall make a good faith effort to replace a DBE subcontract that is unable to perform successfully with another DBE subcontractor. Substitution must be coordinated and approved by the Owner.

The bidder shall establish and maintain records and submit regular reports, as required, which will identify and assess progress in achieving DBE affirmative action efforts.

11. In addition to the submission of the previous information and review by the support staff, all DBE's will be verified through the appropriate Florida agencies. In addition, the Owner will accept certifications made by other DOT recipients.

In the event of a DBE subcontractor replacement, Owner shall have the right to approve all substitutions of subcontractors before bid opening and during contract performance. This will be done to ensure that the contractors are eligible DBE's.

13. Disadvantaged Contractor Agencies in Florida. The following agencies are furnished for the Bidder's information for assistance in locating disadvantaged businesses:

Broward County Minority Builders' Coalition  
665 SW 27th Ave, Suite 16  
Fort Lauderdale, FL 33312  
(954) 792-1121

Central Florida Urban League  
2804 Belco Drive  
Orlando, FL 32808  
(407) 841-7654

Ms. Vicki Smith  
Certification Manager EOO  
605 Suwannee St. MS 65  
Tallahassee, FL 32399  
(850) 414-4746  
Email: victoria.smith@dot.state.fl.us

## **PRIME BIDDER'S QUALIFICATIONS**

Each contractor shall furnish with his bid the following completed and signed statements on "evidence of competency" and "evidence of financial responsibility", which is in accordance with General Provision 20-02.

1. Name of Prime Bidder: \_\_\_\_\_
2. Business Address: \_\_\_\_\_
3. Telephone Number: \_\_\_\_\_
4. When Organized: \_\_\_\_\_
5. Where Incorporated: \_\_\_\_\_
6. How many years have you been engaged in the contracting business under the present firm name? \_\_\_\_\_
7. What is the type of construction work in which you are principally engaged?  
\_\_\_\_\_
8. On separate sheet list similar major airport contracts completed and successfully closed out in the past 5 years.
9. On separate sheet list equipment and personnel with related experience available for this project.
10. Contracts now in hand, Gross Amount: \$\_\_\_\_\_
11. Have you ever refused to sign a contract at your original bid? \_\_\_\_\_
12. Have you ever been declared in default on a contract? \_\_\_\_\_
13. Percentage of pay items to be completed by the Prime Bidder: \_\_\_\_\_%
14. Attach separate sheet with any remarks to evidence of ownership, partnership, joint venture, etc.

**(The above statements must be subscribed and sworn to before a Notary Public.)**

Date: \_\_\_\_\_ Firm Name: \_\_\_\_\_

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

State of Florida Contractor's License No.: \_\_\_\_\_

Date of Expiration: \_\_\_\_\_

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

**EQUAL EMPLOYMENT OPPORTUNITY REPORT STATEMENT**

as required by 41 CFR 60-1.7(b)

The Bidder shall complete the following statement by checking the appropriate lines. Failure to complete these blanks may be grounds for rejection of bid.

1. The Bidder 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 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 has \_\_\_\_ has not \_\_\_\_  
filed with the Joint Reporting Committee the Annual Compliance Report on Standard Form 100 (EEO-1 Report).
4. The Bidder does \_\_\_\_ does not \_\_\_\_  
employ fifty (50) or more employees.

\_\_\_\_\_  
(Name of Bidder)

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

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

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

**CERTIFICATION OF NON-SEGREGATED FACILITIES**

The State of Florida 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 State of Florida 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 State of Florida 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 dollars (\$10,000.00) U.S. 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

\_\_\_\_\_  
Date

**DISADVANTAGED BUSINESS UNAVAILABILITY CERTIFICATION**

I, \_\_\_\_\_, \_\_\_\_\_, of \_\_\_\_\_  
(Name) (Title) (Firm)

certify that on the dates below, I invited the following DBE subcontractor(s) to bid work items to be performed for the project TURN-KEY FUEL FARM at the AVON PARK EXECUTIVE AIRPORT, CITY BID NO 05-15 / FDOT FM NO. 436411-1-94-01

Date of Request	DBE	Name of Subcontractor	Work Items Sought

The following Subcontractors did not bid in response to the invitations:

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

The following Subcontractors submitted bids which were not the low responsible bid:

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

Date: \_\_\_\_\_ By: \_\_\_\_\_ Signature: \_\_\_\_\_

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Signed: \_\_\_\_\_ (SEAL)  
(Notary Public)

**BID BOND**

(NOT TO BE FILLED OUT IF A CERTIFIED CHECK IS SUBMITTED)

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned \_\_\_\_\_, as Principal, and \_\_\_\_\_, a Corporate Surety authorized under the laws of the State of \_\_\_\_\_ to do business in the State of \_\_\_\_\_ and authorized to write this type of bond through a resident agent of the corporation located in the State of \_\_\_\_\_, as surety, are held and firmly bound unto the City of Avon Park in the sum of \_\_\_\_\_ (\$\_\_\_\_\_)

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves and our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that if the attached bid of TURN-KEY FUEL FARM at the AVON PARK EXECUTIVE AIRPORT for the improvement of airport facilities stipulated in said bid in accordance with the plans and specifications provided therefore, is accepted and the contract awarded to the above named bidder, and the said bidder shall within ten (10) days after notice of said award enter into a contract in writing and furnish the required public construction bond with surety, or sureties, to be approved by the City of Avon Park, 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 City of Avon Park as stipulated for liquidated damages.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(Principal must indicate whether corporation, partnership, company or individual)

\_\_\_\_\_

Principal

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

Title

Surety

\_\_\_\_\_

THIS PERSON SIGNING SHALL IN HIS OWN HANDWRITING SIGN THE PRINCIPAL'S NAME, AND HIS TITLE. BY WHERE THE 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.

**STATEMENT OF ASSURANCE THAT CONTRACTOR WILL COMPLY  
WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
(OSHA) EXCAVATION SAFETY STANDARDS (29 CFR  
S.1926.650, SUB-PART B) AND FLORIDA "TRENCH SAFETY ACT"**

CITY BID NO. 05-15  
FDOT FM NO. 436411-1-94-01

The undersigned agrees to perform the work in connection with the TURN-KEY FUEL FARM at the AVON PARK EXECUTIVE AIRPORT in compliance with current Occupational Safety and Health Administration (OSHA) Excavation Safety Standards (29 CFR s.1926.650, Sub-part B) and the Florida "Trench Safety Act".

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

Name of Bidder: \_\_\_\_\_

Authorized Representative: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature and Title)

**NON-COLLUSIVE AFFIDAVIT**

State of \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, deposes and says that:

1. I am the \_\_\_\_\_ of  
(Owner, Partner, Officer, Representative or Agent)  
\_\_\_\_\_, the Bidder that has submitted the attached bid;
2. I am fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such bid;
3. Such bid is genuine and is not a collusive or sham bid;
4. Neither the said bidder nor any of its officers, partners, OWNERS, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham bid in connection with the work for which the attached bid has been submitted; or to refrain from bidding in connection with such work; or have in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any bidder, firm or person to fix the price or prices in the attached bid or of any other bidder or to fix any overhead, profit or cost elements of the bid price of any other bidder or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against (recipient) or any person interested in the proposed work;
5. The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder of any other of its agents, representatives, OWNERS, employees or parties in interest including this affidavit.

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

Its: \_\_\_\_\_

Subscribed and sworn to before me this

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

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

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

**SAMPLE CONTRACT**

FDOT FM NO. 436411-1-94-01  
CITY OF AVON PARK BID NO. 05-15

**THIS CONTRACT**, made this \_\_\_\_\_ day of \_\_\_\_\_ A.D. of 20\_\_\_\_, between the **CITY OF AVON PARK**, a dependent taxing district of the State of Florida, hereinafter called "**OWNER**", the party of the first part, and \_\_\_\_\_ or his, its or their successors, executors, administrators, and assigns hereinafter called the "**CONTRACTOR**", the party of the second part:

**WITNESSETH:**

**1. PURPOSE**

That the said Contractor agrees with the said Owner, for the consideration herein mentioned, at his, its or their own proper cost and expense to do all the work and furnish all the materials, equipment, supplies, and labor necessary to carry out this Agreement in the manner and to the full extent as set forth in the proposal and the accompanying plans, specifications, addenda if any, and drawings, and they are as fully a part of the Contract as if hereto attached or herein repeated, and under security as set forth in the attached contract bond, and to the satisfaction of the fully authorized representatives of the Owner, who shall have at all times full opportunity to inspect the materials to be furnished and the work to be done under this Agreement.

**2. GENERAL DESCRIPTION OF WORK**

It is agreed that the work to be done under this Contract consists of "**TURN-KEY FUEL FARM AT THE AVON PARK EXECUTIVE AIRPORT**" as identified in the City of Avon Park Bid No. 05-15 and as shown in the bid documents prepared by AmHerst Consulting Company, LLC dated March 2015.

**3. PROJECT MANAGERS**

The Project Manager for the Owner is Mr. Wes Teel, AmHerst Consulting Company, LLC; the Project Manager for the Contractor is

\_\_\_\_\_ of \_\_\_\_\_

The parties shall direct all matters arising in connection with the performance of this Contract, other than invoices and notices, to the attention of the Project and/or Construction Managers (the Managers) for attempted resolution or action. The Managers shall provide the latest contact information to one another prior to the Pre-Construction Conference. The Project Managers shall be responsible for overall coordination relating to the performance of the Contract.

**4. CONTRACT DOCUMENTS**

The Contract Documents for FDOT FM No. 436411-1-94-01 and City of Avon Park Bid No. 05-15, which comprise the Contract between the Owner and the Contractor, are attached hereto and made part hereof and consist of the following:

- A. This Contract, pages CI-1 through CI-11 inclusive.
- B. Contractor's Bid Bond, Page BB-1
- C. Contract Documents consisting of:
  - Invitation to Bid, pages INV-1 to INV-6 inclusive
  - Bid Form, pages B-1 to B-4 inclusive
  - Bid Sheet & Bid Schedule, pages B-5 to B-8 inclusive
  - Instructions to Bidders, pages INS-1 to INS-9 inclusive
  - Bid Conditions - DBE, pages BC-1 to BC-6 inclusive
  - Prime Bidder's Qualifications, pages BF1-1 to BF1-2 inclusive
  - Equal Opportunity Report Statement, page BF2-1 inclusive
  - Certification of Non-Segregated Facilities, page BF3-1 inclusive
  - Disadvantaged Business Unavailability Certification, page BF4-1 (if necessary)
  - Statement of Assurance – OSHA Standards, page SA-1 inclusive
  - Non-Collusive Affidavit, page NCA-1 inclusive
  - Final Release Form, page FR-1 inclusive
  - Special Provisions SP1 to SP10 inclusive
  - General Provisions, Sections 10 through 100 inclusive
  - Performance Specification, AST-101 inclusive
- D. Addendum Nos. \_\_\_\_\_, inclusive.
- E. Insurance Certificates, which shall be provided by the Contractor, along with the return of this executed Contract.
- F. Public Construction Bond, which shall be provided by the Contractor, in a form acceptable to the Owner.

G. Any modifications, including change orders, duly delivered after execution of this Contract.

H. Construction Plans dated March 2015.

**5. PERFORMANCE GUARANTY**

That the said Contractor guarantees to repair, replace or otherwise make good to the satisfaction of the Owner any defect in workmanship or material appearing in the work for a period of one year from the date of final acceptance; and further guarantees the successful performance of the work for the service intended. Neither inspection nor payment, including final payment, by the Owner shall relieve the Contractor from his or its obligations to do and complete the work in accordance with this Contract. If the Owner deems it inexpedient to require the Contractor to correct deficient or defective work, an equitable deduction from the contract price shall be made therefore or in the alternative, the Owner may sue for damages.

**6. TIME OF PERFORMANCE**

The Contractor shall begin work within ten (10) calendar days after the signing, execution and delivery of written Notice to Proceed, and shall guarantee completion of Construction in accordance with the provisions set forth in the contract documents.

Commencement of the work by the Contractor shall be deemed a waiver of this notice. The work shall be conducted in such a manner and with sufficient labor, materials, tools, and equipment necessary to complete the work within the time limit set forth in the Contract. Should the organization of the Contractor, or its management, or the manner of carrying on the work be manifestly incompetent, or inadequate to do the work specified within the stated time, then the Owner shall have the right to take charge of the work and finish it and provide the labor, materials and equipment necessary to complete the work as planned within the required time and to charge the cost of all such work against the Contractor and his, or its Surety shall be held responsible therefore.

The Contractor fully understands and agrees that the Owner shall not pay for any obligation or expenditure made by the Contractor prior to the effective date of this Contract, unless the Owner authorizes such payment in writing.

**7. DELAY DAMAGES**

It is mutually agreed between the parties hereto that time is of the essence of this Contract, and in the event the construction of the work is not completed within the time herein specified, it is agreed that from the compensation otherwise to be paid to the Contractor, the Owner may retain the sum of (see Special Provision No. 5) per calendar day for each day thereafter, Sundays and holidays excluded. It is understood and agreed by both parties that these damages represent the actual damages which the Owner will have sustained per calendar day by failure of the Contractor to complete the work within the time stipulated, and this sum is not a penalty, being the liquidated damages the Owner will have sustained in event of such default by the Contractor.

**8. CONTRACT PAYMENT**

The Owner shall pay the Contractor for the performance of this Contract and completion of the project in accordance with the Contract Documents, the total amount of \$\_\_\_\_\_ for the work. This is a unit cost Contract. Actual measurement dictates payment.

**9. PAYMENT SCHEDULE**

The Owner shall make payments on account of the Contract as follows:

Once each month progress payments shall be made during the process of construction in amounts Not-to-Exceed ninety percent (90%) of the amount due on the Contract on the basis of work completed as certified by the Contractor and approved by the Owner's Project Manager and/or Construction Manager. Contractor shall submit a payment application to the Owner's Construction Manager by the fifth (5th) day of each month. The application shall be for the dollar amount of the work complete on the last day of the preceding month. All invoices submitted by the Contractor shall reference the Owner's Contract number(s).

Upon the Completion of the Contract the Contractor shall provide the Owner's Project Manager with written notice that the work is ready for final inspection and acceptance. After written notice by the Contractor, the Owner's Project Manager shall inspect the work to determine whether the work is acceptable under the Contract and that the Contract has been fully performed.

Upon completion of the Contract the Contractor shall submit evidence satisfactory to the Owner that all payroll, materials, bills, and other indebtedness incurred by the Contractor in connection with the construction of the project have been paid in full.

After the work has been inspected and approved and after the Contractor has submitted satisfactory evidence of payment, the Owner's Construction and/or Project Manager(s) shall promptly issue a final certificate. Final payment shall be due within thirty (30) calendar days after the Owner's Project Manager issues the final certificate.

**10. AUDIT**

The Contractor agrees that the Owner or any of its duly authorized representatives shall, until the expiration of five years after expenditure of funds under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this Contract. The Contractor agrees that payment(s) made under this Contract shall be subject to reduction for amounts charged thereto which are found on the basis of audit examination not to constitute allowable costs under this Contract.

The Contractor shall refund by check payable to the Owner the amount of such reduction of payments. All required records shall be maintained until an audit is completed and all questions arising therefrom are resolved, or five years after completion of the project and issuance of the final certificate, whichever is sooner.

**11. PUBLIC RECORD**

The Contractor shall allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the Owner in conjunction with this Contract.

**12. GUARANTEE**

The Contractor guarantees the work to be free from construction defects for a period of one (1) year from final payment by the Owner, in accordance with the guarantee requirements of the General Provisions.

**13. CONTRACTOR RESPONSIBILITY**

The Contractor is an independent contractor and is not an employee or agent of the Owner. Nothing in this Contract shall be interpreted to establish any relationship other than that of an independent contract between the Owner and the Contractor, its employees, agents, subcontractors or assigns, during or after the performance of this Contract. The Contractor shall take the whole responsibility of the work and shall bear all losses resulting to him, or it, on account of the amount or character of the work, or because of the nature of the ground in or on which the work is done is different from what was assumed or expected, or because of bad weather, or because of errors or omissions in his or its bid on the Contract price, or except as otherwise provided in the Contract Documents because of any other causes whatsoever.

The Contractor shall protect the entire work, all materials under the Contract and the Owner's property (including machinery and equipment) in, or on or adjacent to the site of the work until final completion and work, from the action of the elements, acts of other contractors, or except as otherwise provided in the Contract Documents, and from any other causes whatsoever; should any damage occur by reason of any of the foregoing, the Contractor shall repair at his, or its, own expense to the satisfaction of the Owner or its Project Manager. Neither the Owner nor its officers, employees or agents assume any responsibility for collection of indemnities or damages from any person or persons causing injury to the work of the Contractor.

At his, or its expense, the Contractor shall take all necessary precautions (including without limitation) the furnishing of guards, fences, warning signs, walks, flags, cables and lights for the safety of and the prevention of injury, loss and damage to persons and property (including without limitation) in the term persons, members of the public, the Owner and its employees, and agents, the Project Manager and his employees, Contractor's employees, his or its subcontractors and their respective employees, other contractors, their subcontractors and respective employees, on, about or adjacent to the premises where said work is being performed, and shall comply with all applicable provisions of safety laws, rules, ordinances, regulations and orders of duly constituted public authorities and building codes.

The Contractor assumes all risk of loss, damages and destruction to all of his or its materials, tools appliances and property of every description and that of his or its subcontractors and of their respective employees or agents, and injury to or death of the Contractor, his or its employees, subcontractors or their respective employees or agents, including legal fees, court costs or other legal expenses, arising out of or in connection with the performance of this Contract.

The Contractor agrees to forever save and keep harmless and fully indemnify the Owner, its Officers, employees and agents of and from all liabilities, damages, claims, recoveries, costs and expense because of loss of, or damage to, property, or injury to or deaths of persons in any way arising out of or in connection with the performance of this Contract to the extent of the bond and insurance provisions set out in Articles 15 and 16 in this Contract.

**14. INSPECTION**

The project will be inspected by the Construction and/or Project Manager and will be rejected if it is not in conformity with the Contract provisions. Rejected work will be immediately corrected by the Contractor. When the work is substantially completed, the Contractor shall notify the Owner in writing that the work shall be ready for final inspection on a definite date, at least three (3) calendar days thereafter, which shall be stated in such notice.

**15. PUBLIC CONSTRUCTION BOND**

The Contractor shall, prior to the commencement of work hereunder, furnish to the Owner a public construction bond acceptable to the Owner covering the faithful performance of this Contract and the payment of all obligations arising hereunder to **be AT LEAST in the amount of \_\_\_\_\_** (minimum 100% of Contract amount) with a Surety or Sureties satisfactory to the Owner.

**16. INSURANCE**

- (a) The Contractor shall procure and maintain, through the term of this Contract, Worker's Compensation insurance in accordance with the laws of the State of Florida and in amounts sufficient to secure the benefits of the Florida Workmen's Compensation law for all employees of the Contractor and all subcontractors. The Workmen's Compensation insurance policy required by the Contractor shall also include Employer's liability.
- (b) The Contractor shall maintain during the lifetime of this Contract insurance policies in the amounts and of the kinds specified in the Special Provisions included herein.
- (c) The Contractor shall obtain in the name of the Owner, Owner's Protective Liability Insurance which shall have the same limits of coverage as that required above for the Contractor.
- (d) The cost of all insurance shall be included in the various unit prices bid.
- (e) Certificates to all insurance required from the Contractor shall be subject to the Owner's approval for adequacy
- (f) The Contractor shall not commence work until he has obtained all the insurance required herein. Insurance shall be maintained in full force and effect until the Contract has been fully and completely performed, as evidenced by final acceptance payment. All insurance policies shall provide for a thirty (30) day written notice to the Owner in the event of any modification, cancellation, or expiration of said policies.

**17. DEFAULT: TERMINATION**

- (a) **FOR CAUSE:** If either party fails to fulfill its obligations under this Contract in a timely and proper manner, the other party shall have the right to terminate this Contract by giving written notice of any deficiency and by allowing the party in default seven (7) calendar days to correct the deficiency. If the defaulting party fails to correct the deficiency within this time, this Contract shall terminate at the expiration of the seven (7) calendar day time period.

With regard to the Contractor, the following items shall be considered a default under this Contract:

- (1) If the Contractor should be adjudged bankrupt, or if he, or it, should make a general assignment for the benefit of his, or its, creditors, or if a receiver should be appointed on account of his, or its, insolvency.
- (2) If the Contractor should persistently or repeatedly refuse or fail, except in cases for which an extension of time is provided, to supply enough properly skilled workmen or proper material or if the Contractor should fail to make prompt payment for materials, or labor or other services entering into the work.

- (3) If the Contractor disregards laws, ordinances, or the instructions of the Construction and/or Project Manager or otherwise is guilty of a substantial violation of the provisions of the Contract.

In the event of termination, the Owner may take possession of the premises and all materials, tools, and appliances, thereon and finish the work by whatever method it may deem expedient. In such cases, the Contractor shall only be entitled to receive payment for work satisfactorily completed prior to the termination date. If such expense of finishing the work shall exceed such unpaid balance the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Construction and/or Project Manager(s).

- (b) WITHOUT CAUSE: Either party may terminate the Contract without cause at any time upon thirty (30) calendar days prior written notice to the other party. In the event of termination, the Owner shall compensate the Contractor for all authorized work satisfactorily performed through the termination date.

**18. VERIFICATION OF EMPLOYMENT STATUS**

Contractor agrees that it shall bear the responsibility for verifying the employment status, under the Immigration Reform and Control Act of 1986, of all persons it employs in the performance of the Contract.

**19. FLORIDA PRODUCED LUMBER**

Contractor agrees to comply with the provisions of Section 255.20, Florida Statutes (1987) where pertinent.

**20. ASSIGNMENT**

Contractor shall not assign this Contract to any other persons or firm without first obtaining Owner's written approval.

**21. ATTORNEYS' FEES AND COSTS**

In the event the Contractor defaults in the performance of any of the terms, covenants and conditions of this Contract, the Contractor agrees to pay all damages and costs incurred by the Owner, including reasonable attorney's fees.

**22. NOTICES**

All notices or other communications hereunder shall be in writing and shall be deemed duly given if delivered in person or sent by certified mail return receipt requested and addressed as follows:

If to Owner:

Ms. Maria Sutherland  
Administrative Services Director  
City of Avon Park  
110 East Main Street  
Avon Park, Florida 33825

With copies to:

Mr. Wes Teel  
Project Manager  
AmHerst Consulting Company, LLC  
1000 Legion Place, Suite 1285  
Orlando, Florida 32801

If to Contractor:

**23. INDULGENCE NOT WAIVER**

The indulgence of either party with regard to any breach or failure to perform any provision of this Contract shall not be deemed to constitute a waiver of the provision or any portion of this Contract either at the time the breach or failure occurs or at any time throughout the term of this Contract.

**24. CONFLICT OF INTEREST**

The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of service required hereunder, as provided for in Florida Statutes Section 112.311. The Contractor further represents that no person having any interest shall be employed for said performance.

The Contractor shall promptly notify the Owner in writing by certified mail of all potential conflicts of interest prohibited by existing state law for any prospective business association, interest or other circumstance which may influence or appear to influence the Contractor's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the Contractor may undertake and request an opinion of the Owner as to whether the association, interest or circumstance would, in the opinion of the Owner, constitute a conflict of interest if entered into by the Contractor. The Owner agrees to notify (30) days of receipt of notification by the Contractor. If, in the opinion of the Owner, the prospective business association, interest or circumstance would not constitute a conflict of interest by the Contractor, the Owner shall so state in the notification and the Contractor shall, at his/her option, enter into said association,

interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the Owner by the Contractor under the terms of this Agreement.

**25. INTERPRETATION; VENUE**

This Contract constitutes the entire Agreement between the parties with respect to the subject matter hereof and supersedes all prior verbal or written Agreements between the parties with respect thereto. This Contract may only be amended by written document, properly authorized, executed and delivered by both parties hereto. This Contract shall be interpreted as a whole unit and section headings are for convenience only. All interpretations shall be governed by the laws of the State of Florida.

**26. CONTINGENT FEES**

The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor, to solicit or secure this Contract, and that it has not paid or agreed to pay any persons, company, corporation, individual or firm, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this Contract.

**27. LOBBYING AND INFLUENCING STATE EMPLOYEES**

(1) No State appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence any contractor, officer, or employee of the State in connection with the making of any State grant and the amendment or modification of any State grant.

(2) If any funds other than State appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any contractor, officer, or employee of the State in connection with the making of any State grant, the contractor shall provide a full disclosure of lobby activities.

**28. RIGHTS TO INVENTIONS**

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

**29. VETERAN'S PREFERENCE**

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to veterans and disabled veterans. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

**IN WITNESS WHEREOF**, the Owner has hereunto subscribed and the Contractor has affixed his, its, or their names, or name, and seal the date aforesaid.

**ATTEST:**

**CITY OF AVON PARK**

\_\_\_\_\_  
City Clerk

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

Approved as to Form and Correctness:

\_\_\_\_\_  
City Attorney

**GENERAL CONTRACTOR**

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

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

**(SEAL)**

**ATTEST:**

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

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

**FINAL RELEASE FORM**

KNOW ALL MEN BY THESE PRESENTS, that the undersigned, for and in consideration of the payment of the sum of \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_) paid by the CITY OF AVON PARK, (hereinafter referred to as "Owner"), receipt of which is hereby acknowledged as total and complete compensation for performance of the below-described Contract, does hereby fully and completely discharge and release the Owner from and waives any and all debts, accounts, promises, damages, liens, encumbrances, causes of action, suits, bonds, judgments, claims and demands whatsoever, in law or in equity, which the undersigned ever had, now has or might hereafter have on account of labor performed, material furnished or services rendered, directly or indirectly, for the contract between the parties dated \_\_\_\_\_, 20\_\_\_\_, known as AVON PARK EXECUTIVE AIRPORT, FDOT FM NO. 436411-1-94-01 and CITY BID NO. 05-15, except for those claims, disputes and other matters arising out of or relating to said contract which have been raised by written demand in accordance with the Contract Documents prior to this date and identified by the Contractor as unsettled in the final Application for Payment and are either in arbitration or court litigation, as the case may be, in accordance with the Contract Documents.

The undersigned further covenants that all sub-contractors, suppliers, material men and any or all other persons supplying material, supplies, services or labor used directly or indirectly in the prosecution of the work provided for in the Contract have been paid in full.

The undersigned shall maintain in full force and effect the provisions of the Contract Documents respecting the guaranty against defective work and any other special guarantees required by the Contract Documents, for the terms provided in the Contract Documents, which terms shall begin to run from the date specified in the Contract Documents. The undersigned shall also maintain in full force and effect the bond it posted as a guaranty against defective pavement.

The undersigned represents and warrants that the statements contained in the foregoing Release are true and correct.

IN WITNESS WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

WITNESSES:

CONTRACTOR

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

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

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

STATE OF: \_\_\_\_\_

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

Sworn to and subscribed before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

(NOTARY SEAL)

My Commission expires: \_\_\_\_\_

**CERTIFICATION OF PAYMENT TO DISADVANTAGED  
BUSINESS ENTERPRISE (DBE) SUBCONTRACTORS**

FDOT FM NO. 436411-1-94-01  
CITY BID NO. 05-15

The following DBE Subcontractors have been paid in full for all services or labor performed, material or supplies used directly or indirectly in the prosecution of the work provided for in the Contract.

I. DBE Subcontractors

<u>Name of Subcontractor</u>	<u>Amount Paid</u>	<u>% of Final Contract Amount</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

IN WITNESS WHEREOF, I hereunto set my hand and seal this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

WITNESS:  
\_\_\_\_\_  
\_\_\_\_\_

CONTRACTOR  
By: \_\_\_\_\_  
Title: \_\_\_\_\_

State of \_\_\_\_\_

County of \_\_\_\_\_

Sworn to and subscribed before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(NOTARY SEAL)  
NOTARY PUBLIC

My Commission expires: \_\_\_\_\_

**CONTRACTOR'S CERTIFICATION OF COMPLETION**

**TO:** Avon Park Executive Airport

**DATE:** \_\_\_\_\_

**PROJECT NO.:** \_\_\_\_\_

**FDOT FM No.:** 436411-1-94-01

**CITY BID No.** 05-15

**OWNER:** City of Avon Park

**PROJECT:** TURN-KEY FUEL FARM

**ATTN.:** AmHerst Consulting Company, LLC  
Wes Teel

**FROM:** \_\_\_\_\_  
(Firm or Corporation)

This is to certify that I, \_\_\_\_\_, am an authorized official of \_\_\_\_\_ working in the capacity of \_\_\_\_\_ and have been properly authorized by said firm or corporation to sign the following statements pertaining to the subject contract:

I know of my own personal knowledge and do hereby certify that the work of the contract described above has been performed and materials used and installed in every particular in accordance with and in conformity to the contract drawings and specifications.

The contract work is now complete in all parts and requirements and ready for your final inspection.

I understand that neither the determination by the Engineer-Architect that the work is complete nor the acceptance thereof by the OWNER shall operate as a bar to claim against the Contractor under the terms of the guarantee provisions of the Contract Documents.

**BY:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**FOR:** \_\_\_\_\_

Distribution: Owner, Engineer, RPR, File

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

**TO:** City of Avon Park, OWNER  
**PROJECT TITLE:** TURN-KEY FUEL FARM at the AVON PARK EXECUTIVE AIRPORT  
**DATE OF SUBSTANTIAL COMPLETION:** \_\_\_\_\_  
**PROJECT NO.:** FM No. 436411-1-94-01 / City Bid No. 05-15  
**LOCATION:** Avon Park, Florida  
**PROJECT DESCRIPTION INCLUDES:** Install New Fuel Farm  
**CONTRACTOR:** \_\_\_\_\_  
**CONTRACT FOR:** Airport Improvements

The work performed under this contract has been inspected by authorized representatives of the Owner, Contractor and Engineer and the Project is hereby declared to be substantially completed on the above date.

**DEFINITION OF SUBSTANTIAL COMPLETION:**

The date of substantial completion of a project or specified area of a project is the date when the construction is sufficiently completed in accordance with the contract documents as modified by any Change Orders agreed to by the parties so that the Owner can occupy or utilize the project or specified area of the project for the use for which it was intended.

A tentative list of items to be completed or corrected is appended hereto. This list may not be exhaustive and the failure to include an item on it does not alter the responsibility of the Contractor to complete all the work in accordance with the contract documents.

**ENGINEER: AMHERST CONSULTING COMPANY**

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

The Contractor accepts the above Certificate of Substantial Completion and agrees to complete and correct the items on the tentative list within the time indicated.

**CONTRACTOR:** \_\_\_\_\_

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

The Owner accepts the project or specified area of the project as substantially complete and will assume full possession of the project or specified area of the project at \_\_\_\_\_ (time) on (date). The responsibility for security and insurance under the contract documents shall be set forth under "Remarks" below.

**OWNER: CITY OF AVON PARK / AVON PARK EXECUTIVE AIRPORT**

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

Remarks: The Owner accepts full responsibility for normal security and insurance of the project improvements as of the date of full possession. (attach additional sheet, if necessary)

# **SECTION 2**

# **SPECIAL PROVISIONS**

**SPECIAL PROVISION NO. 1**  
**LIST OF CONTRACT DRAWINGS**

The drawings which show the location, character, dimensions and details of the work to be done and which are to be considered as a part of the contract supplementary to the specifications are as follows:

<b><u>Sheet No.</u></b>	<b><u>Description</u></b>
<b><u>GENERAL</u></b>	
G01	COVER SHEET
G02	SITE PLAN
<b><u>CIVIL</u></b>	
C01	SURVEY CONTROL PLAN

**END OF SPECIAL PROVISION NO. 1**

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## **SPECIAL PROVISION NO. 2** **AIRPORT PROJECT PROCEDURES**

### **I. PERMITS**

Contractor shall be required to procure and pay for all construction permits, arrange for all inspections and similar procedural items as required by the code enforcement authorities having jurisdiction.

### **II. AIRPORT OPERATIONS**

Airport operations shall be maintained throughout this Contract. The Contractor shall in no way curtail or handicap normal operational characteristics of the airport facility except as specifically indicated and specified in these Contract Documents.

### **III. LIMITS OF CONSTRUCTION**

Any surface graded or disturbed outside the construction limits as shown on the plans will be restored and sodded or seeded and mulched (Hydroseed) as directed by the Engineer at the Contractor's expense.

### **IV. CONSTRUCTION LAYOUT AND STAKES**

Contractor shall employ a Professional Land Surveyor to furnish all lines, grades and measurements necessary for the proper prosecution and control of the work and contracted for under these specifications. The Contractor's Professional Land Surveyor will establish horizontal and vertical control points only. Contractor is thereafter responsible to maintain these control points for use by subsequent contractors.

### **V. VERIFICATION OF EXISTING CONDITIONS**

Prior to bidding and commencing with construction, the Contractor shall familiarize himself as to the existing conditions. Should the Contractor discover any inaccuracies, errors or omissions between the actual existing conditions and the Contract Documents, he shall within seven (7) calendar days prior to Bid Opening, notify the Engineer in writing. Submission of Bid by the Contractor shall be held as an acceptance of the existing conditions by the Contractor.

### **VI. SAFETY AND PROTECTION**

1. **Safety:** Inasmuch as each work area will be accessible to and used by the public, the Owner and other companies doing business at the Airport during the construction period, it is the Contractor's responsibility to maintain each work area in a safe, hazard free condition at all times. Should the Owner find the area unsafe at any time, they will notify the Contractor, and the Contractor shall stop progress work and take whatever steps necessary to remedy the unsafe condition immediately. Should the Contractor not be immediately available for corrective action, the Owner will remedy the problem and the Contractor shall reimburse the Owner for the expense of such correction.

2. **Protection of Property:** Fixed structures, equipment, paving, landscaping and vehicles (automobiles, trucks, etc.) shall be protected with drop cloths, shielding and other appropriate measures to ensure maximum protection of all property and vehicles.

## VII. PRECONSTRUCTION CONFERENCE/JOB COORDINATION MEETINGS

1. **Preconstruction Conference:** Before beginning work at the site, the Contractor shall attend a pre-construction conference and bring with him the superintendent employed for this project. In the event the Contractor is unable to attend, he shall send a letter of introduction with the superintendent in which he advises the superintendent's full name and states that he is assigned to the project, will be on-site full time and will be in full responsible charge. The Contractor shall present the superintendent's name and qualifications at the Preconstruction Conference.

This conference will be called by the Engineer or Resident Project Representative (RPR), who will arrange for the Owner's representative and other interested parties to be present. At this time, all parties will discuss the project under contract and prepare a program of procedure in keeping with requirements of the drawings and specifications. The superintendent will henceforth make every effort to expeditiously coordinate all phases of the work, including the required reporting procedure, to obtain the end result within the full purpose and intent of the drawings and specifications for the project.

2. **Job Coordination Meetings (JCM):** JCM's will be conducted on an "as needed" basis at a time and location to be designated at the Preconstruction Conference.

## VIII. ADMINISTRATIVE/SUPERVISORY PERSONNEL

The Contractor shall provide a full-time Project Management Team consisting of a Project Manager, Project Superintendent(s) and other supervisory personnel for the duration of the Project. The names and qualifications of this team for this work shall be submitted to the Owner as part of the Bidder Qualification Form. They shall have a minimum of five (5) years of experience on suitable projects of equal difficulty. The Owner and the Engineer reserve the right to accept or deny the use of the proposed Project Manager and supervisory personnel. Either the Project Manager or the Project Superintendent shall be at the construction site at all periods when work is in progress - this person shall have full authority to act in the Contractor's behalf.

It is agreed and understood that, if requested in writing by the Owner, the Contractor shall replace any member of the team with another meeting the required qualifications within three (3) days of the receipt of the request.

## IX. SPECIAL REPORTS

1. **Reporting Unusual Events:** When an event of an unusual and significant nature occurs at the site, the Contractor shall prepare and submit a special report to the Engineer. List chain of events, persons participating, response by the Contractor's personnel, an evaluation of the results or effects and similar pertinent information. Advise the Owner and Engineer as soon as possible when such events are known.
2. **Special Reports:** Submit any special reports directly to the Owner within one day of occurrence. Submit a copy of the report to the Architect/Engineer/RPR and other entities that are affected by the occurrence within one day of the occurrence.

## X. CHANGES IN THE SCHEDULE

**Minor Changes:** Each week, prior to the weekly coordination meeting during the time of the contract, the Contractor shall notify the Owner's Representative of any minor changes that are anticipated in the schedule for the following week.

**Major Changes:** If for any reason a major change in the approved schedule is anticipated, the Contractor shall make the necessary changes to the schedule and resubmit the revised schedule for approval.

Copies of the approved schedule shall be posted by the Contractor in the RPR's field office with completed work identified in colored pencil. Refer to Special Provision No. 9 for project schedule requirements.

## XI. MAINTENANCE OF TRAFFIC

1. **Damages:** The Contractor shall not obstruct nor create a hazard to any traffic during the prosecution of the work and shall be responsible for repair of all damage to existing pavement or facilities caused by his operations.
2. **Beginning Date of Contractor's Responsibility:** The Contractor's responsibility for maintenance of traffic shall begin on the date of the Notice-to-Proceed (NTP) and continue until Final Completion and Acceptance of the Project.
3. **Sections Not Requiring Traffic Maintenance:** The Contractor will not be required to maintain traffic over those portions of the Project where no work is to be accomplished or where construction operations will not affect aircraft operations. The Contractor, however, shall not obstruct nor create a hazard to any traffic during the prosecution of the work and shall be responsible for repair of any damage to existing pavement or facilities caused by his operations.
4. **Traffic during Construction:** All construction vehicles are required to use existing traffic routes. Normal traffic lanes are not to be used as staging areas for arriving delivery vehicles. The Contractor's employees shall utilize the designated Contractor employee parking area.
5. **Contractor Signage:** The Contractor may furnish and install construction traffic directional signs along the existing traffic route. The signs shall depict Contractor's

logo or name, directional arrows and "deliveries". Signs shall be of sufficient size to have 6" high message and shall be located at each decision point. All signs and their locations shall be approved by the Engineer and Owner. **NO OTHER SIGNS ARE PERMITTED.**

- 6. Material Deliveries:** The Contractor shall make his own material and equipment deliveries. No deliveries shall be made by vendors or suppliers without escort by a representative of the Contractor.
- 7. Notification:** On days when construction traffic is expected to be extra heavy or when oversized pieces of equipment are to be delivered, give minimum seventy-two (72) hours notice to the Engineer and the RPR.
- 8. Material Orders:** All Contractor's material orders for delivery to the work site will use as a delivery address, the street name and number assigned to the access point onto the airport. **The name "AVON PARK EXECUTIVE AIRPORT" shall not be used in the delivery address at any time.** All Contractor material orders for the work site shall be delivered to the areas designated as the Contractor's receiving area. All deliveries shall be made only during the Contractor's working hours.
- 9. Interference Request:**
  - a.** The Contractor shall be responsible for notifying the Owner in writing and securing approval for any and all interruptions or interference with traffic (pedestrian, automobile or other necessary function of the Airport).
  - b.** The request shall include a traffic control plan indicating barricades, lighting and flagmen where required.
  - c.** Such notification shall be made as soon as possible but in no case less than 48 hours prior to interference.
  - d.** It is suggested that the Contractor utilize a standard form addressed to the Owner with a blank space for a description of the interference, the exact area affected, the exact times and dates the interference will take place and blanks for the Owner's approval. The forms shall be submitted in duplicate. No interference will be allowed until the Contractor has received back a copy of the approved interference request form.
- 10. Personnel Traffic:**
  - a. General:** All construction personnel shall be restricted to construction areas. They shall wear shirts with sleeves and long pants at all times and comply with OSHA guidelines for protective gear.
  - b. Use of Public Areas:** The Contractor's workmen shall not utilize public areas for taking their "work breaks" or "lunch breaks". Areas for this purpose can be designated by the Owner upon request. Public restrooms shall not be used by any workmen at any time.

## **XII. DAILY CLEAN-UP AND TRASH REMOVAL**

The Contractor shall be responsible for daily clean-up, debris and trash removal. Accumulation of trash and debris will not be allowed and the Architect/Engineer/RPR may at any time direct the Contractor to stop work and immediately remove his trash and debris from the site of the work when in the opinion of the Owner such trash constitutes a nuisance or in any way hinders the work or the Airports operations. It shall not be allowed to become a hazard to the safety of the public. If the Contractor should fail to remove his trash and debris from the site of the work in a timely manner, the Owner may have this work performed and deduct the cost of such from Contractor's payment.

## **XIII. CLEANING AND PROTECTION**

- 1. General:** During handling and installation of work at the project site, clean and protect work in progress and adjoining work on the basis of continuous daily maintenance. Apply protective covering on installed work to ensure freedom from damage or deterioration.
- 2. Cleaning/Maintenance:** Clean and perform maintenance on installed work as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- 3. Limiting Exposures of Work:** To the extent possible through appropriate control and protection methods, supervise performance of the work in such a manner and by such means which will ensure that none of the work, whether completed or in progress, will be subjected to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period. Such exposures include, where applicable, but not by way of limitation the following:
  - a. Excessive static or dynamic loading
  - b. Excessive internal or external pressures
  - c. Solvents
  - d. Chemicals
  - e. Light
  - f. Puncture
  - g. Abrasion
  - h. Heavy Traffic
  - i. Soiling
  - j. Combustion
  - k. High speed operation, improper lubrication, unusual wear
  - l. Improper shipping or handling
  - m. Theft
  - n. Vandalism
- 4. Protection at Openings:** The Contractor shall provide protection at all openings in structures and finishes to maintain the building weather and dust tight. All protection shall be of solid material and substantial so that it will not be disturbed by wind and weather normal to the area and season, and also tight fitting to prevent noise infiltration.

**5. Protection of Improvements:**

- o.** Damage to Existing Facilities: Existing surfaces and materials of the Owner's property not requiring work by the Contract Documents that is damaged by the Contractor's operations shall be immediately repaired. Repaired surfaces and materials shall match existing adjacent undamaged surfaces and materials. Repair work shall be coordinated with the Engineer and Owner with regard to time and method.
- p.** Accidental Demolition: All structures or parts thereof that may become damaged due to accident or Contractor's error shall be restored to their original condition at no cost to the Owner. Materials and equipment being used in the repair or replacement resulting from damage shall be new and shall perform at the manufacturer's published capacities. If the existing equipment or materials cannot be identified, or if unavailable, the selection of the replacement will be subject to approval by the Engineer in writing.

**6. Overhead Protection**

- a.** No cranes or other construction equipment shall cross over non-construction personnel, their travel ways or ride systems.
- b.** The plan of operation of cranes and other hoisting equipment shall be established in writing by the Contractor. This plan of operation shall be subject to approval by the Engineer.

**XIV. CONSERVATION AND SALVAGE**

- 1. General:** It is a requirement for supervision and administration of the work that construction operations be carried out with the maximum possible consideration given to conservation of energy, water and materials. In addition, maximum consideration shall be given to salvaging materials and equipment involved in performance of the work but not incorporated therein. Refer to other sections for required disposition of salvaged materials which are the Owner's property.

**XV. COSTS BORNE BY CONTRACTOR**

The Contractor shall bear the costs as follows:

**1. Testing Costs:**

- a.** If substitute materials or equipment are proposed by the Contractor, he shall pay all costs (ie. additional testing requirements, etc.) which may be necessary to satisfy the Engineer that specification requirements are met. The Contractor shall pay for the Engineer's time spent in review and administrating such proposed substitution.
- b.** If materials or workmanship are used which fail to meet specification requirements, the Contractor shall pay the cost of all re-testing, including

laboratory costs, deemed necessary by the Engineer to determine the safety or suitability of the material or element.

- c. The Contractor shall pay for all testing costs including, but not limited to, power, fuel, and equipment cost which may be required for complete testing of all equipment and systems for proper operation.
- d. The Contractor shall pay for all testing required for materials, job mix designs, equipment, structures and related items included in all shop drawings and other submittals as required by the contract to be submitted and approved by the Engineer prior to construction.
- e. The Contractor shall bear all costs necessary for the Quality Control testing as stipulated in the General Provisions.
- f. The Contractor shall bear all costs necessary to provide cores/samples and material samples for the Owner to perform such tests necessary to insure work and materials comply with the contract specifications.

## **2. Shop Drawing Review Costs**

- a. If materials or workmanship proposed for use fail to gain a satisfactory response (one that requires no additional information to be resubmitted to gain satisfactory approval) from the Engineer and fail to meet contract requirements, the Contractor shall pay the cost of all additional reviews, deemed necessary by the Engineer to determine the suitability of the material or element. The Contractor shall pay for the Engineer's time spent in review and administering such proposed substitution at the rates contained in the Engineer's contract with the Owner.

## **3. Contractor's Work Week Costs**

- a. Refer to Special Provision No. 10.

## **4. Project Closeout Costs**

- a. Should the Contractor fail to meet the schedule deadline imposed for submission of project closeout information, reference is made to Special Provision No. 5.

The Engineer shall provide periodic statements that reflect the above costs using the Engineer's prevailing rates. All costs borne by the Contractor shall be assessed by the Owner against payments that may be due. The Owner will compensate the Engineer accordingly. The Owner reserves the right to assess these costs at any time during the performance of the contract and adjust the amount of the retainage to cover such costs if necessary.

## **XVI. PROJECT DOCUMENTATION**

### **1. Project Drawings**

The successful Contractor(s) will be furnished, at no charge, four (4) copies of drawings and specifications.

A field set of drawings and specifications shall remain on the job site at all times and shall be available at all times to the Engineer. The field set shall be continuously updated to reflect the "as-built" condition of all work included in this Contract. The Contractor shall provide evidence that the field set is current at the time of each pay application request.

The Contractor shall immediately include plainly and conspicuously on the field set of drawings, and at appropriate paragraphs in the specifications, all changes or corrections made by addenda and change orders as they are issued.

Approved copies of all shop drawings and other submittals are to be kept on the job site at all times and shall be available at all times to the Engineer.

Changes and deviations from the existing conditions shall be submitted in writing for approval prior to installation. In no case shall any unspecified equipment or materials be installed without prior approval by the Engineer.

### **2. Record Documents**

- a. Definition: Record copies are defined to include those documents or copies relating directly to performance of the work, which the Contractor is required to prepare or maintain for the Owner's records, recording the work as actually performed. In particular, record copies show changes in the work in relation to the way in which work was shown and specified by the original contract documents and show additional information of value to the Owner's records but not indicated by the original Contract Documents.

Record copies include newly-prepared drawings (if any are specified), marked-up copies of contract drawings, shop drawings, specifications, addenda and change orders, marked-up product data submittals, record samples, field records for variable and concealed conditions such as excavations and foundations, and miscellaneous record information on work which is otherwise recorded only schematically or not at all.

- b. Record Drawings: The Contractor shall maintain a set of Record Drawings at the job site. These shall be kept legible and current and shall be available for inspection at all times by the Engineer. Show all changes or work added on these Record Drawings in a contrasting color.

- 1) Mark-up Procedure: During progress of the work, maintain a white-print set (blue-line or black-line) of contract drawings and shop drawings, with mark-up of actual installations which vary substantially from the work as originally shown. Mark whatever drawing is most

capable of showing actual physical condition, fully and accurately. Where shop drawings are marked up, mark cross-reference on contract drawings at corresponding location. Mark with erasable colored pencil, using separate colors where feasible to distinguish between changes for different categories of work at the same general location. Mark-up important additional information which was either shown schematically or omitted from original drawings. Give particular attention to information on work concealed, which would be difficult to identify or measure and record at a later date. Note alternate numbers, change order numbers and similar identification. Require each person preparing the mark-up to initial and date the mark-up and indicate the name of the firm. Label each sheet "PROJECT RECORD" in 1-1/2 inch high letters.

In showing changes in the work, use the same legends as used on the original drawings. Indicate exact locations by dimensions and exact elevations by job datum. Give dimensions from a permanent point.

- 2) Preparation of Transparencies: In preparation for certification of substantial completion on the last major portion of the work, review the completed mark-up of record drawings and shop drawings with the Architect/Engineer. The Architect/Engineer will then proceed with preparation of a full set of corrected transparencies for contract drawings. The Architect/Engineer will date each updated drawing and label each sheet "PROJECT RECORD" in 1-1/2 inch high letters. Printing as required herein is the responsibility of the Architect/Engineer.
  - 3) Copies, Distribution: Upon completion of transparency record drawings, the Architect/Engineer shall prepare three blueline or blackline prints of each drawing, regardless of whether changes and additional information were recorded thereon. The Architect/Engineer shall then organize each of the three copies into manageable sets, bind with durable paper cover sheets, and print suitable titles and dates. The mark-up set of prints maintained during the construction period shall be bound in the same manner. The Architect/Engineer will retain one copy set. At the completion of the project, the Architect/Engineer shall submit one set of mylars and one set of prints with changes noted thereon to the Owner.
- c. Record Drawings shall contain the names, addresses and phone numbers of the General Contractor and the major subcontractors.
  - d. The Architect/Engineer shall be the sole judge of the acceptability of the Record Drawings. Receipt and acceptance of the As-Built drawings is a prerequisite for Final Payment.

### **3. Record Specifications**

- a. During the progress of the work, maintain one copy of specifications, including addenda, change orders and similar modifications issued in printed

form during construction. Mark-up variations (of substance) in actual work in comparison with text of specifications and modifications as issued. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data where applicable. Upon completion of the mark-up, submit to the Architect/ Engineer for the Owner's records. Label the front cover "PROJECT RECORD" in 1-1/2 inch high letters.

- b. Where the manual is printed on one side of the page only, mark variations on the blank left-hand pages of the Project Manual, facing printed right-hand pages containing original text affected by variation.

#### **4. Record Product Data**

During progress of the work, maintain one copy of each product data submittal and mark up significant variations in the actual work in comparison with submitted information. Include both variations in product as delivered to site and variations from the manufacturer's instructions and recommendations for installation. Give particular attention to concealed products and portions of the work which cannot otherwise be readily discerned at a later date by direct observation. Note related change orders and mark-ups of record drawings and specifications. Upon completion of the mark-up, submit a complete set of product data submittals to the Architect/Engineer for the Owner's records. Label each data submittal "PROJECT RECORD" in 1-1/2 inch high letters.

#### **5. Record Sample Submittal**

Immediately prior to the date(s) of substantial completion, the Architect/Engineer and Owner's personnel will meet with the Contractor on site and will determine if any of the submitted samples maintained by the Contractor during progress of the work are to be transmitted to the Owner for record purposes. Comply with the Architect/Engineer's instructions for packaging, identification marking and delivery to the Owner's sample storage space. Dispose of other samples in the manner specified for disposal of surplus and waste materials, unless otherwise indicated by the Architect/Engineer.

#### **6. Miscellaneous Record Submittals**

Refer to other sections of these specifications for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the work. Immediately prior to the date(s) of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect/Engineer for the Owner's records. Categories of requirements resulting in miscellaneous work records are recognized to include, but are not limited to, the following:

- a. Required field records on excavations, foundations, underground construction, wells and similar work.

- b. Accurate survey showing locations and elevations of underground lines, including invert elevations of drainage piping, valves, tanks and manholes.
- c. Surveys by a Registered Land Surveyor establishing lines and levels of finished construction.
- d. Soil treatment certification.
- e. Inspection and Test Reports: Where not processed as shop drawings or product data.
- f. Asphalt or PCC concrete pavement or structural mix design record.
- g. Concrete block certification.

#### **7. Contractor's Project Closeout**

Contractor's Project Closeout is hereby defined to include general requirements near end of Contract Time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by the Owner and similar actions evidencing completion of the work. Specific requirements for individual units of work are specified in other sections. Time of closeout is directly related to substantial completion, and therefore may be a single time period for the entire work or a series of time periods for individual parts of the work which have been certified as substantially complete at different dates. The time variation, if any, shall be applicable to other provisions of this section.

#### **8. Prerequisites to Substantial Completion**

- a. Prior to requesting the Architect/Engineer's inspection for certification of substantial completion, for either the entire work or portions thereof, complete the following and list known exceptions in request:
  - 1) In the progress payment request coincident with or first following the date claimed, show 100% completion for the portion of work claimed as "substantially completed", or list incomplete items, value of incompleteness, and reasons for being incomplete.
  - 2) Include supporting documentation for completion as indicated in the Contract Documents.
  - 3) Submit statement showing accounting of changes to the Contract Sum.
  - 4) Advise the Owner of pending insurance change-over requirements.
  - 5) Obtain and submit releases enabling the Owner's full and unrestricted use of the work and access to services and utilities, including, where required, occupancy permits, operating certificates, and similar releases.

- 6) Deliver tools, spare parts, extra stocks of materials, and similar physical items to the Owner.
  - 7) Make the final change-over of locks and transmit keys to the Owner and advise Owner's personnel of change-over in security provisions.
  - 8) Complete start-up testing of systems and instructions of Owner's operating-maintenance personnel. Discontinue or change over and remove from the project site, temporary facilities and services, along with construction tools and facilities, mock-ups and similar elements.
- b. Inspection Procedures: Upon receipt of the Contractor's request, the Architect/Engineer will proceed with inspection or advise the Contractor of prerequisites not fulfilled. Following initial inspection, the Architect/Engineer will prepare a Certificate of Substantial Completion or advise the Contractor of the work which must be performed prior to issuance of the Certificate and will perform a repeat inspection when requested and assured by the Contractor that the work has been substantially completed. Results of the completed inspection will form the initial "Punchlist" for final acceptance.

#### **9. Prerequisites to Final Acceptance**

- a. Prior to requesting the Architect/Engineer's final inspection for certification of final acceptance as required by the General Provisions, the Contractor shall complete the following and list known exceptions in the request:
- 1) Submit a certified copy of the Architect/ Engineer's final Punchlist of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, endorsed and dated by the Architect/ Engineer.
  - 2) Submit final meter readings for utilities, measured record of stored fuel, and similar data as of time of substantial completion or when the Owner took possession of and responsibility for corresponding elements of the work.
  - 3) Complete final cleaning up requirements, including touch-up of marred surfaces.
  - 4) Touch up and otherwise repair and restore marred exposed finishes.
- b. Re-inspection Procedures: Following Substantial Completion, the Contractor shall correct or remedy all Punchlist items to the satisfaction of the Architect/Engineer and Owner within a one (1) week period after the Date of Substantial Completion. If subsequent inspections are necessary after the one week period in order to eliminate all deficiencies, the cost of all subsequent inspections with respect to the Owner and Engineer's time shall be paid by the Contractor. When ready, the Contractor shall request in writing a final inspection of the work. Upon completion of re-inspection, the

Engineer will prepare a Certificate of Final Acceptance or advise the Contractor of work not completed or obligations not fulfilled as required for Final Acceptance. If necessary, the procedures will be repeated.

#### **10. Prerequisites to Final Payment**

- a. Final Payment: Final Payment will be made after final acceptance of the project by the Architect/Engineer and Owner upon request by the Contractor on condition that the Contractor:
  - 1) Furnish properly executed complete releases of lien from all materialmen and subcontractors who have furnished materials or labor for the Work and submit supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
  - 2) Furnish the Contractor's Affidavit of Release of Liens (2 copies) that all materialmen and subcontractors have been paid in full. In the event they have not been paid in full, the Owner shall retain a sufficient sum to pay them in full and at his option may make direct payment as provided in Chapter 84, Florida Statutes, as amended, to obtain complete releases of lien.
  - 3) Furnish Contractor's Affidavit of Debts and Claims (2 copies).
  - 4) Furnish required sets of record drawings and maintenance and operating instructions of new mechanical equipment.
  - 5) Furnish guarantees signed by subcontractors, material suppliers, and countersigned by the Contractor for operating equipment.
  - 6) Submit specific warranties, workmanship-maintenance bonds, maintenance agreements, final certifications and similar documents.
  - 7) Furnish a signed guarantee, in form acceptable to the Engineer and Owner agreeing to repair or replace as decided by the Architect/Engineer, all work and materials that prove defective within one (1) year (or more) from the date of final acceptance, including restoration of all other work damaged in making such repairs or replacements.
  - 8) Furnish Consent of Surety to final payment.
  - 9) Submit updated final statement, accounting for final changes to Contract Sum.
  - 10) Submit evidence of final, continuing insurance coverage complying with insurance requirements.

- 11) Certify that all Social Security, Unemployment and all other taxes (City, State, Federal Government) have been paid.
- 12) Provide receipt, as applicable, of affidavits certifying all labor standards of local, State, or Federal requirements have been complied with by the Contractor.

## **11. Record Document Submittals**

Specific requirements for record documents are shown in the section, PROJECT RECORD DOCUMENTS. Other requirements are indicated in the General Provisions. General submittal requirements are indicated in "Submittals" sections. Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect/Engineer's reference during normal working hours.

- a. Record Drawings: The Architect/Engineer shall organize record drawing sheets into manageable sets, bind with durable paper cover sheets and print suitable titles, dates and other identification on the cover of each set.
  - 1) If required, a Record Survey in hard copy and electronic formats (AutoCAD, latest Release) shall be provided by the Contractor to the Engineer.
- b. Record Specifications: Upon completion of mark-ups, submit to the Architect/Engineer for the Owner's records.
- c. Record Product Data: Upon completion of mark-ups, submit complete sets to the Architect/Engineer for the Owner's records.
- d. Record Sample Submittal: Comply with the Architect/ Engineer's instructions for packaging, identification, marking and delivery to the Owner's sample storage space.
- e. Miscellaneous Record Submittals: Complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect/Engineer for the Owner's records.
- f. Maintenance Manuals: Complete, place in order, properly identify and submit to the Architect/Engineer for the Owner's records.

## **12. Closeout Procedures**

General Operating and Maintenance Instructions: Arrange for each installer of work requiring continuing maintenance or operation, to meet with the Owner's personnel at the project site to provide basic instructions needed for proper operation and maintenance of the entire work. Include instructions by manufacturer's representatives where installers are not expert in the required procedures. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuel, identification system, control sequences,

hazards, cleaning and similar procedures and facilities. For operational equipment, demonstrate start-up, shut-down, emergency operations, noise and vibration adjustments, safety, economy, efficiency adjustments, and similar operations. Review maintenance and operations in relation with applicable warranties, agreements to maintain bonds, and similar continuing commitments.

#### **XVII. FINAL CLEANING/PROTECTION/COMPLIANCES**

1. **Final Cleaning:** Provide final cleaning of the work, at the time indicated, consisting of cleaning each surface or unit of work to normal "clean" condition in a manner acceptable to the Engineer and Owner.
2. **Removal of Protection:** Remove temporary protection devices and facilities which were installed during the course of the work to protect previous completed work during the remainder of the construction period.
3. **Compliances:** Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site, bury debris or excess materials on the Owner's property. Do not discharge volatile or other harmful or dangerous materials into drainage systems. Remove waste materials from site and dispose of in a lawful manner.

Where extra materials of value remaining after the completion of the associated work have become the Owner's property, dispose of these as directed by the Owner.

#### **XVII. PAYMENT**

Unless provided for as a contract line item, no separate payment shall be made for the local permit and inspection fee requirements stated above. All costs necessary to provide these items or services shall then be included in the cost of Mobilization.

**END OF SPECIAL PROVISION NO. 2**

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## **SPECIAL PROVISION NO. 3** **SAFETY AND SECURITY REQUIREMENTS**

### **I. GENERAL**

FAA Advisory Circular 150/5370-2F is made part of this contract. Safety requirements included in this project shall comply with the following provision:

### **II. SAFETY REQUIREMENTS**

- A. Construction Sequencing. All construction being accomplished under this contract shall be in accordance with the phasing and sequencing indicated on the drawings.
- B. Construction Activity and Aircraft Movements. During the time that the Contractor is performing the work under this project, the Airport will remain in use by aircraft except as provided herein. To the extent feasible and convenient, in the opinion of the Engineer, the use by aircraft of runways and taxiways adjacent to areas where the Contractor is working will be so scheduled as to reduce disturbance to the Contractor's operations. Aircraft operations, unless otherwise specified in the contract specifications, shall always have priority over any and all of the Contractor's operations and the Contractor shall not allow his employees, subcontractors, materialmen or any other persons over whom he has control, to enter or remain upon or allow any plant or materials to be brought or remain upon any part of the airport which, in the opinion of the Engineer, would be a hazardous location.

Should aprons, runways or taxiways be required for use of aircraft and should the Engineer or RPR deem the Contractor to be too close to the portion used by aircraft for safety, he may in his sole discretion order the Contractor to suspend his operations, remove his personnel, plant, equipment and materials to a safe distance and stand by until the runway and taxiways are no longer required for use by aircraft.

- C. Limitations of Construction
1. All Contractor vehicles that are authorized to operate on the Airport outside of the designated construction area limits or haul routes as specified on the plans and in the active Aircraft Operations Area (AOA) shall display in full view above the vehicle a 3' x 3' or larger orange and white checkerboard flag, each checkerboard color being 1' square. Any vehicle operating in the active AOA during the hours of darkness shall be equipped with a flashing amber (yellow) dome-type light mounted on top of the vehicle and of such intensity to conform to local codes for maintenance and emergency vehicles. White flashing lights of any kind are not permitted.
  2. All Contractor vehicles that are required to cross active runways, taxiways and approach clear zones shall do so under direct control of a flagman. The flagman shall be trained and instructed by Airport Operations in the regulations governing operations on the AOA and the Airport. The flagman shall remain with his vehicle at all times. Flagman shall be furnished by the Contractor. All aircraft traffic on runways, taxiways and aprons shall have priority over Contractor's traffic.

3. No runway, taxiway, apron or airport roadway shall be closed without written approval of the Airport Manager to enable necessary "Notices to Airman" (NOTAM) or advisories to airport service or tenants. A minimum of 72 hours' notice of requested closing shall be directed to the Engineer or RPR who will coordinate the request with the Airport Manager.
4. Any construction activity within 250' of an active runway centerline or 93' from an active taxiway centerline or open excavations in excess of three inches (3") deep within the above areas will require closure of the affected runway or taxiway unless otherwise approved by the Airport Manager. Closure requires the same provisions as Paragraph D.3 above.
5. Open flames, welding or torch-cutting operations are prohibited unless adequate fire and safety precautions have been taken and the procedure approved by the Airport Manager.
6. Stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions in excess of 10 knots.
7. Open trenches, excavation and stockpiled material located in the AOA shall be prominently marked with flags and lighted by approved light units during hours of low visibility and darkness.
8. The Contractor must provide his authorized personnel with radios operating on the UNICOM frequency of 122.8 MHz when crossing active runways or taxiways.
9. The Contractor is to provide barricades across pavement to isolate construction activities from aircraft operating areas at locations as shown on the plans or as determined by the RPR. Barricades are to be orange and white striped "saw-horse" or "low-silhouette" type barricades with battery operated red flashing lights as determined by the RPR. Each barricade shall have a minimum of two flashing lights with the intensity of the lights being of such brightness so as to be readily identified during darkness periods. Barricades to be spaced approximately 30' on centers unless otherwise directed by the Engineer. Barricades to be sandbagged as necessary to prevent being blown over. Barricades shall be removed at individual locations as paving in the area is completed.
10. During runway closures, the Contractor shall provide temporary runway closure markers on each runway end (over runway numerals) in accordance with the special provisions of these specifications unless otherwise approved by the Engineer.
11. Equipment and materials shall not be left on or within 400' from active runway centerlines and 93' from active taxiway centerlines after work operations are ceased each work shift.
12. The Contractor shall keep all active airfield pavement clear of all debris, stones and other materials during construction. All active pavement shall be cleaned

and inspected by the Contractor's superintendent prior to release of work crews after each shift of work.

13. All construction barricades shall be inspected by the Contractor's superintendent prior to release of work crews after each work shift to ensure barricades are properly placed and lighted for non-work hours.
14. All existing facilities, equipment (runway/taxiway lights, visual aids, NAVAIDS, etc.) and underground utilities shall be carefully protected by the Contractor. Any damage to these items caused by the Contractor or Sub-Contractors shall be immediately repaired and restored to a condition similar or equal to the original condition. All lighting systems must be operational for the duration of this contract.

### III. SECURITY REQUIREMENTS

- A. General Intent. It is intended that the Contractor shall comply with all security requirements specified herein.
- B. Identification of Personnel. The Contractor shall furnish the RPR, at the Preconstruction Conference and prior to the Notice to Proceed, a list of all personnel who will be assigned to the project.
- C. Identification - Vehicles. The Contractor shall require each vehicle to display a large company sign on both sides of vehicles and advise the RPR, a current list of companies authorized to enter and conduct work on the Airport. Contractor employee personal vehicles are not allowed on the airfield at any time.
- D. Access to the Site. Contractor's access to the site shall be as shown on the plans or as directed by the Engineer or RPR. All contractor traffic authorized to enter the site shall be experienced in the route or guided by contractor personnel. The Contractor shall be responsible for traffic control to and from the various construction areas on the site. The Contractor shall not permit any unauthorized construction personnel or traffic on the site. The Contractor is responsible for immediate clean-up of any debris deposited along the access route as a result of his construction traffic. Directional signing at the access gate and along the delivery route to the storage area or work site shall be directed by the Engineer or RPR.
- E. Materials Delivery to the Site. All Contractor's material orders for delivery to the site must be escorted by the Contractor. This will preclude delivery trucks from entering into the Airport or taking shortcuts through the perimeter gates and entering into aircraft operations areas inadvertently.
- F. Construction Area Limits. The limits of construction, material storage areas, equipment storage area, parking area and other areas defined as required for the Contractor's exclusive use during construction shall be marked. The Contractor shall erect and maintain around the perimeter of these areas suitable fencing, marking and/or warning devices visible for day/night use.

**IV. PAYMENT**

1. Unless provided for as a contract line item, no separate payment shall be made for the safety and security requirements stated above. All costs necessary to provide these items or services shall then be included in the cost of Mobilization.

**END OF SPECIAL PROVISION NO. 3**

**SPECIAL PROVISION NO. 4**  
**PROTECTION OF AIRPORT CABLES, CONTROLS,**  
**NAVAIDS, AND WEATHER BUREAU FACILITIES**

1. The Contractor is hereby informed that there may be installed on the Airport FAA NAVAIDS including, without limitation, airfield lighting systems, electric cables and controls relating to such NAVAIDS and facilities. Such NAVAIDS 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 change in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason determined by the Resident Project Representative (RPR) 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 RPR or the Airport Management shall be immediately executed. Construction work will be commenced in the cleared area only when additional instructions are issued by the RPR.

2. The Contractor shall verify actual locations of power and control cables. Through the entire time of this construction, the Contractor shall not allow any construction equipment to cross power and control cables leading to and from any navigational aids or other facilities without first protecting the cable on three (3) feet either side of the marked cable route. All excavation within three (3) feet of existing cables shall be accomplished by hand digging only.
3. This Special Provision intends to make perfectly clear the need for protection of navigational aids and other facilities and cables by this contractor at all times.
4. The Contractor shall immediately repair, at his own expense, with identical material by skilled workmen, any underground cables serving navigational aids and other airport facilities, which are damaged by his workmen, equipment, or work. Prior approval of the Engineer and RPR must be obtained for the materials, workmen, time of day or night, and for the method of repairs for any temporary or permanent repairs the Contractor proposes to make to any airport facilities and cables damaged by this Contractor. Should the repair require splicing, it shall be spliced at the direction of the RPR. No work shall be backfilled or covered prior to approval by the RPR.

**END OF SPECIAL PROVISION NO. 4**

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**SPECIAL PROVISION NO. 5**  
**CONSTRUCTION TIME AND LIQUIDATED DAMAGES**

**I. GENERAL**

The specific details pertaining to contract sequence and time are an important aspect of the project for planning of the various operational requirements of the airport. The Contractor shall be required to comply with the general intent of the phasing, scheduling and duration of the project as outlined in the contract documents or as otherwise approved by submittals allowed by the documents.

**II. CONSTRUCTION TIME**

- A. The construction plans and specifications set forth the time allocated to each of the elements of work required as part of this contract. The work shall be completed within the time established or as otherwise approved or liquidated damages in the amount of \$500 per day shall be assessed.
- B. The Contractor must request and receive written approval from the Engineer for acceptance of the work prior to satisfying the requirements of being "complete".
- C. The specified time shall be outlined in these specifications or as otherwise agreed to in writing among the Owner, Engineer and Contractor based upon the actual contract work awarded.
  - 1. The total Contract Times for work under the Contract is 120 Calendar Days.
  - 2. The Contractor's Project Closeout must be complete to the Engineer's and Owner's satisfaction within 15 calendar days of the contract Construction Completion Date as identified in the Notice to Proceed (NTP) issued after award and prior to commencement of work.

**III. CONSTRUCTION SCHEDULE**

- A. In accordance with Special Provision No. 9, the Contractor(s) shall prepare and submit a detailed schedule for work awarded. This schedule shall be reviewed with the Owner, Engineer and Contractor(s) in order to establish the final approved schedule as it relates to this Special Provision.
- B. The anticipated NTP date is TBD.

**END OF SPECIAL PROVISION NO. 5**

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## **SPECIAL PROVISION NO. 6** **TEMPORARY FACILITIES**

### **I. GENERAL DEFINITIONS**

- A. This section specifies certain minimum temporary facilities to be provided regardless of methods and means selected for performance of the work but not by way of limitation and not assured for compliance with governing regulations. Use of alternate temporary facilities may be permitted subject to the Engineer's and Owner's approval and acceptance.
- B. Energy Considerations: Administer the use of temporary facilities in a manner which conserves energy but without delaying work or endangering persons or property; comply with reasonable requests by the Engineer and Owner.
- C. Costs: Except as otherwise indicated, costs associated with temporary facilities are the Contractor's. Temporary facilities remain the property and responsibility of the Contractor.
- D. Dust Control: Adequate measures shall be taken to prevent the transfer of dust to other areas of the airport complex during the entire project duration period, including weekends and dates not considered eligible days for work as shown in Special Provision No. 5.
- E. Noise Control: Where work is being conducted in or adjacent to occupied areas, the Contractor shall make every effort to keep construction noise to a minimum.
- F. Fire Protection: In addition to temporary water service for construction and the placing of permanent fire protection facilities in operating condition at earliest feasible date, provide fire extinguishers of types and sizes recommended by NFPA or any other governing authority or agency.  
  
Provide Type A extinguishers in field offices and for similar exposures, Type ABC in construction areas. Locate extinguishers near each entrance. Prohibit smoking except in marked, non-hazardous areas. Smoking in existing premises is prohibited.
- G. Environmental Protection: Review exposure to possible environmental problems with the Engineer and Owner. Establish procedures and discipline among tradesmen and provide needed facilities which will protect against environmental problems (pollution of air, water and soil, excessive noise and similar problems).

## **II. TEMPORARY PROTECTION**

- A. Provide facilities and services as necessary to effectively protect project from losses and persons from injury during the course of construction.
- B. The existing utilities shall not be modified for use by the Contractor. Do not interrupt existing services serving occupied or used facilities except when authorized in writing by the Owner. Provide temporary services during interruptions to existing utilities as acceptable to the Owner.
- C. The Contractor shall furnish electrical and water utilities as required and provide temporary power, telephone and system connections where required by the Owner to continue operation of existing equipment or systems during construction.

## **III. TEMPORARY STAGING/STORAGE AREAS**

- A. The Contractor may provide a trailer or prototype building/field office for his own use. The location of the field office or building must be approved by the Engineer and Owner. All costs for connection to utilities shall be paid for by the Contractor. Water, electric and telephone will be available on site.
- B. Equipment not in use during construction, nights and/or holidays shall be parked in areas designated by the Engineer and Owner. Construction workers' private vehicles shall be parked within these areas.
- C. The Contractor shall provide one 8' x 4' x 3/4" exterior grade plywood sign, properly supported, with bottom 6'0" above grade. Engage professional sign painter to apply graphics and lettering as indicated or approved by the Engineer. The placement of the sign shall be approved by the Owner. **NO OTHER SIGNS ARE PERMITTED.**
- D. During construction, the Contractor shall maintain these areas in a neat condition. The Contractor's vehicles, equipment and materials shall be stored in the areas designated by the Engineer. Upon completion of the work, the staging and storage areas shall be cleaned up and returned to their original condition to the satisfaction of the Owner. Remove all construction fencing and barricades from the project site. No special payment will be made for clean-up and restoration of the storage area.
- E. Personal vehicles will not be permitted beyond the Contractor's parking area. Drivers of vehicles being operated beyond this area shall be subject to loss of permission to enter the construction site.
- F. If additional storage areas are needed, the Contractor may request it from the Engineer. The request will be reviewed on the basis of what is to be stored and the area needed. The Contractor shall provide any necessary fencing and/or security.

**IV. TEMPORARY CONSTRUCTION FACILITIES**

- A. De-watering: Maintain construction work free of water accumulation. Do not endanger the work or adjacent properties.
  - a. De-watering operations and any de-watering permits necessary to complete any portion of this project including, but not limited to, excavation, embankment, installation of utility pipes, ducts, stormwater discharge pipes and drainage structures, shall be considered incidental to the bid item for which de-watering may be necessary.
- B. Miscellaneous Facilities: Provide miscellaneous facilities as needed including ladders, runways, shoring, scaffolding, railing, bracing, barriers, closures, platforms, temporary partitions and similar items.

**V. TEMPORARY SUPPORT FACILITIES**

- A. General: Provide facilities and services as may be needed to properly support the primary construction process and meet governing regulations.
- B. Drinking Water: Provide either pipe-connected potable water fountains or electric cooled bottled water fountains or insulated potable water containers in work areas spaced so that personnel at the site will travel no more than 300 feet.
- C. Toilets: Furnish adequate temporary sanitary facilities within the Contractor's staging and storage areas located on the drawings for the use of workmen during the entire period of construction. Temporary facilities shall be furnished at a minimum ratio of one toilet for each 25 workmen or as required by local governing code, whichever is greater. The toilets shall be portable, chemical type or water-borne type connected to an approved existing sanitary sewer.

Toilets shall be placed or installed in conformity with local governing code requirements and shall be enclosed in a weather-tight, fly-proof building with a self-closing door. The building shall be tied down to prevent overturning by wind. Provide standard, roll-type toilet paper holder and a supply of standard, roll-type toilet tissue.

The premises shall be thoroughly disinfected at least twice each week. Provide means for locking the door from the outside and keep locked at all times except during hours that workmen are at the project site.

**VI. TEMPORARY UTILITY SERVICES**

- A. The Contractor shall coordinate the requirements for temporary utilities with the Owner and shall install at the Contractor's expense all necessary utilities in a safe, acceptable manner. Should leaks, breaks, etc. occur during installation or use, the Contractor shall immediately notify the appropriate utility personnel and promptly repair the utility so as to keep disruption of service to a minimum.
- B. The Contractor shall provide temporary wiring if required. All wiring shall meet all safety requirements of the National Electrical Code, Florida Department of Commerce, Bureau

of Workmen's Compensation or local requirements. In addition, all wire shall be so sized that it is not overloaded according to the National Electrical Code and all wire used shall be fused to adequately protect that wire according to the Code referred to.

- C. The Contractor shall provide all temporary lines and connections from existing sources of water as required for the work. The Contractor is responsible for proper drainage of water used.
- D. The Contractor shall furnish all temporary wiring, piping connections and other apparatus that is needed to operate the utilities and shall remove all evidence of same when work is complete.
- E. The Contractor is responsible for obtaining and paying for all utilities that he requires at the project site.

## **VII. STAGING, STOCKPILE AND SPOIL AREAS**

- A. The staging area(s) depicted on the plans shall be used to house the Contractor's and Resident Project Representative's offices and to store all idle equipment, supplies and construction materials (other than bulk materials such as aggregate, sand and soil).
- B. The Contractor may erect and maintain throughout the life of this contract, at his expense, a six-foot high fence of chain link fabric around the perimeter of each staging area used. He may also install vehicle and pedestrian gates as necessary to provide adequate ingress/egress.
- C. Additionally, the perimeter of any staging area which abuts an active operation pavement shall be marked with yellow flashing barricades no more than 50 feet apart.
- D. Upon completion of all work, remove all construction fencing and barricades from the project site.
- E. The Contractor's vehicles, equipment and materials shall be stored in the area designated on the plans. Upon completion of the work, the storage area shall be cleaned up and returned to its original condition to the satisfaction of the Owner.
- F. Personal services will not be permitted beyond the Contractor's parking area. Drivers of vehicles being operated beyond this area shall be subject to loss of permission to enter the construction site.
- G. Equipment not in use during construction, nights and/or holidays will be parked in the Contractor's staging area. Exceptions will only be approved by the Engineer when absolutely necessary. Parking of construction workers' private vehicles shall also be within the staging area construction fence.
- H. Stockpile areas shall be used to store all bulk materials needed for the project and may or may not be fenced at the Contractor's option. However, yellow flashing barricades shall be installed where potential conflicts with air or ground vehicular traffic might occur.

- I. Separate stockpiles shall be created for the project construction. Separate stockpiles shall be created for structural soil and topsoil. Stockpiles shall not penetrate the FAR Part 77 imaginary surfaces.
- J. All other waste material, including, but not limited to, concrete rubble and debris, shall be removed from the Airport at the Contractor's expense, unless otherwise directed by the Engineer.
- K. Unless otherwise specified, all material removed by excavation, such as soil, asphalt or limerock not utilized by the Contractor for stabilization material, will be transported to locations on Airport property and spread evenly or stockpiled at the direction of the Owner.
- L. All materials determined by the Engineer to be unsuitable for disposal on airport property shall be hauled off airport property and disposed of in a manner satisfactory to the Engineer.
- M. All costs for hauling and disposal of unsuitable material shall be considered incidental to the costs bid for the work in this project.
- N. The Contractor shall provide all necessary temporary environmental controls as directed by the Engineer (including, but not limited to: hay bales, silt fence, etc.) to protect the environment from erosion of the stockpile areas.

#### **VIII. PAYMENT**

Unless provided for as a contract line item, no separate payment shall be made for the temporary facilities requirements stated above. All costs necessary to provide these items or services shall then be included in the cost for Mobilization.

**END OF SPECIAL PROVISION NO. 6**

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## **SPECIAL PROVISION NO. 7**

### **TESTING**

#### **I. GENERAL**

##### **B. QUALITY CONTROL (QC) TESTING**

1. The Contractor is responsible for all costs for QC testing.
2. Testing to be performed during construction is as shown in these contract documents, technical specifications and plans.

#### **II. TESTING COST BORNE BY OWNER**

The Owner shall not bear any costs for QC testing.

#### **III. TESTING COST BORNE BY CONTRACTOR**

All construction QC testing costs shall be borne by the Contractor. Qualified in-house personnel and/or an independent testing laboratory selected and responsible to the Contractor shall perform all QC testing required by the technical specifications and General Provisions or as directed by the Owner and/or the Engineer.

##### **A. The Contractor shall bear the costs as follows:**

1. If substitute materials or equipment are proposed by the Contractor, he shall pay all costs (i.e., additional testing requirements, etc.) which may be necessary to satisfy the Engineer that specification requirements are met. The Contractor shall pay for the Engineer's time spent in review and administrating such proposed substitution.
2. If materials or workmanship are used which fail to meet specification requirements, the Contractor shall pay the cost of all re-testing, including laboratory costs, deemed necessary by the Engineer to determine the safety or suitability of the material or element.
3. The Contractor shall pay for all testing costs including, but not limited to, power, fuel, and equipment cost which may be required for complete testing of all equipment and systems for proper operation.
4. The Contractor shall pay for all testing required for materials, job mix designs, equipment, structures and related items included in all shop drawings and other submittals as required by the contract to be submitted and approved by the Engineer prior to construction.
5. The Contractor shall bear all costs necessary for the Quality Control testing as stipulated in the General Provisions.
6. The Contractor shall bear all costs necessary to provide cores/samples and material samples for the Owner to perform such tests necessary to

insure work and materials comply with the contract specifications.

#### **IV. CONSTRUCTION FIELD TESTING**

As a minimum, tests will be conducted in the field as stipulated in the Technical specifications and General Provisions.

#### **V. CERTIFICATES OF COMPLIANCE.**

##### **A. MATERIAL CERTIFICATIONS**

1. The Contractor shall furnish the Engineer material certifications obtained from the producer, supplier or an approved independent testing laboratory for the following types of materials, unless otherwise directed by the Engineer.

- a. Materials required to meet criteria documented by tests which are normally performed during the production process.
- b. Materials which are required to meet specifications other than those published by AASHTO or ASTM.
- c. Materials produced at locations which are not within routine travel distance for the Owner.
- d. Materials required to meet criteria documented by tests involving special equipment not readily available to the Owner.
- e. Any other special material when so directed by the Engineer.
- f. Material certifications of one of the following types shall be furnished for pre-tested materials.

- i. **Manufacturer's Certification**

A manufacturer's certification shall be a certified statement that the material actually shipped to the project was manufactured by production processes which are periodically and routinely inspected to ensure conformance to specification requirements.

- ii. **Certified Test Reports**

A certified test report shall be a certified report of tests conducted by an approved independent testing laboratory on samples taken from a lot

which is typical of the material actually shipped to the project but which may or may not be from the lot shipped.

iii. Supplier's Certification:

A supplier's certification is a signed statement by the supplier that the material described in the certification is of the specification grade required and that the supplier has on hand material certifications to cover the material which is included in the supplier's certification.

**VI. PAYMENT**

A. Unless provided for as a contract line item, no separate payment shall be made for the testing requirements stated above. All costs necessary to provide these items or services shall then be included in the cost for Mobilization.

**END OF SPECIAL PROVISION NO. 7**

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**SPECIAL PROVISION NO. 8**  
**CITY OF AVON PARK INSURANCE REQUIREMENTS**

**TURN-KEY FUEL FARM**  
**at the Avon Park Executive Airport**

**GENERAL**

Refer to the following for the City of Avon Park's Insurance Requirements.

**INSURANCE – BASIC COVERAGES REQUIRED**

**Comprehensive General Liability Insurance** with a limit of \$2,000,000 per occurrence and \$1,000,000 Aggregate for personal injury and property damage.

**Automobile Liability Insurance** with a minimum combined single limit of \$1,000,000 for bodily injury and property damage per occurrence/policy aggregate.

**Worker's Compensation Insurance** in the amount required by law to provide protection for employees of the Submitter in the event of job related injuries.

**Professional Liability or Errors and Omissions Insurance** having minimum limits of \$2,000,000 per claim and \$2,000,000 aggregate liability.

**INSURANCE REQUIREMENTS AND CONDITIONS:** All of the policies of insurance referred to shall be written in a form satisfactory to the City and by insurance companies satisfactory to City, but not less than AM Best "A", with City being included as an additional named insured, and with the insurer waiving any subrogation rights against City. The City agrees that it will not unreasonably withhold its approval as to the form or to the insurance companies selected by the Contractor in compliance with this Special Provision. The Contractor shall pay all of the premiums and deliver the policies, or certificates of the policies, to the City at execution of this Contract. In the event of the Contractor's failure either to acquire the insurance in the names called for or to pay the premiums or to deliver the policies, the City shall have the right to terminate this Contract immediately, or within the number of days that current policy(ies) continue to be valid, whichever is the longest time period.

**END OF SPECIAL PROVISION NO. 8**

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**SPECIAL PROVISION NO. 9**  
**CONTRACTOR'S WORK WEEK**

**I. CONTRACTOR'S STANDARD WORK WEEK**

- A. The project's standard work week shall consist of five (5) days per week, Monday through Friday).
- B. Each working calendar day (reference Special Provision No. 5) within the standard work week shall consist of twelve (12) hours per day.
- C. The working hours for each calendar day are 7 AM to 5 PM at the latest. The contractor shall not arrive on-site before 7 AM and shall depart the site each day by 5 PM at the latest unless otherwise approved by the Engineer's Resident Project Representative.
- D. The Contractor's Project Manager or Project Superintendent are required to be on-site at all times during the Contractor's performance of work.

**END OF SPECIAL PROVISION NO. 9**

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**SPECIAL PROVISION NO. 10**  
**LOCAL PERMIT AND INSPECTION FEES**

**I. GENERAL**

In accordance with Florida Statutes SEC. 218.80, the Public Bid Disclosure Act, this Special Provision contains known permit and inspection fee requirement information. Any permit or inspection fee inadvertently not identified shall be reimbursed to the contractor at face value.

**II. CITY OF AVON PARK RESPONSIBILITIES**

- A. Local Inspection Fees
  - 1. NONE
- B. Florida Department of Environmental Protection
  - 1. Storage Tank Facility Registration

**III. CONTRACTOR RESPONSIBILITIES**

- A. Local Inspection Fees – NONE
- B. City of Avon Park Water Use Fees
  - 1. Metered – per project

**IV. PAYMENT**

- A. Unless provided for as a contract line item, no separate payment shall be made for the local permit and inspection fee requirements stated above. All costs necessary to provide these items or services shall then be included in the cost for Mobilization.

**END OF SPECIAL PROVISION NO. 10**

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# **SECTION 3**

## **GENERAL PROVISIONS**

**GENERAL PROVISIONS**  
**SECTION 10 - DEFINITION OF TERMS**

Whenever 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 interpreted as follows:

**10-01 AASHTO.** The American Association of State Highway and Transportation Officials, the successor association to AASHO.

**10-02 ACCESS ROAD.** The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.

**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 AIP.** The Airport Improvement Program, a grant-in-aid program, administered by the Federal Aviation Administration.

**10-05 AIR OPERATIONS AREA.** For the purpose of these specifications, the term air operations area 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.

**10-06 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; and airport buildings and facilities located in any of these areas, and includes a heliport.

**10-07 ASTM.** The American Society for Testing and Materials.

**10-08 AWARD.** The acceptance, by the Owner, of the successful bidder's proposal.

**10-09 BIDDER.** Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.

**10-10 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.

**10-11 CALENDAR DAY.** Every day shown on the calendar.

**10-12 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 the work affected by such changes. The work, covered by a change order, shall be within the scope of the contract.

**10-13 CONTRACT.** The written agreement covering the work to be performed. The awarded contract shall include, but is not limited to: The Advertisement; The Contract Form; The Proposal; The Performance Bond; The Payment Bond; any required insurance certificates; The Specifications; The Plans, and any addenda issued to bidders.

**10-14 CONTRACT ITEM (PAY ITEM).** A specific unit of work for which a price is provided in the contract.

**10-15 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.

**10-16 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.

**10-17 DRAINAGE SYSTEM.** The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.

**10-18 ENGINEER.** The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering inspection of the contract work and acting directly or through an authorized representative.

**10-19 EQUIPMENT.** All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.

**10-20 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 Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.

**10-21 FAA.** The Federal Aviation Administration of the U.S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his/her duly authorized representative.

**10-22 FEDERAL SPECIFICATIONS.** The Federal Specifications and Standards, Commercial Item Descriptions, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government.

**10-23 FORCE ACCOUNT.** Force account construction work is construction that is accomplished through the use of material, equipment, labor, and supervision provided by the Owner or by another public agency pursuant to an agreement with the Owner.

**10-24 INSPECTOR.** An authorized representative of the Engineer assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.

**10-25 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 entire section, specification item, or cited standard that may be pertinent to such specific reference.

**10-26 LABORATORY.** The official testing laboratories of the Owner or such other laboratories as may be designated by the Engineer.

**10-27 LIGHTING.** A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.

**10-28 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 percent of the total amount of the award contract. All other items shall be considered minor contract items.

**10-29 MATERIALS.** Any substance specified for use in the construction of the contract work.

**10-30 NOTICE TO PROCEED.** 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.

**10-31 OWNER.** The term “Owner” shall mean the party of the first part or the contracting agency signatory to the contract. For AIP contracts, the term “sponsor” shall have the same meaning as the term “Owner.” Where the term “Owner” is capitalized in this document, it shall mean airport owner or sponsor only.

**10-32 PAVEMENT.** The combined surface course, base course, and subbase course, if any, considered as a single unit.

**10-33 PAYMENT BOND.** The approved form of security furnished by the Contractor and his/her surety as a guaranty that he will pay in full all bills and accounts for materials and labor used in the construction of the work.

**10-34 PERFORMANCE BOND.** The approved form of security furnished by the Contractor and his/her surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.

**10-35 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.

**10-36 PROJECT.** The agreed scope of work for accomplishing specific airport development with respect to a particular airport.

**10-37 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.

**10-38 PROPOSAL GUARANTY.** The security furnished with a proposal to guarantee that the bidder will enter into a contract if his/her proposal is accepted by the Owner.

**10-39 RUNWAY.** The area on the airport prepared for the landing and takeoff of aircraft.

**10-40 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.

**10-41 SPONSOR.** See definition above of "Owner."

**10-42 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; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.

**10-43 SUBGRADE.** The soil that forms the pavement foundation.

**10-44 SUPERINTENDENT.** The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.

**10-45 SUPPLEMENTAL AGREEMENT.** A written agreement between the Contractor and the Owner covering (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract; or (2) work that is not within the scope of the originally awarded contract.

**10-46 SURETY.** The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.

**10-47 TAXIWAY.** For the purpose of this document, the term taxiway means 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 or aircraft parking areas.

**10-48 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.

**10-49 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 6 hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered as working days.

**END OF SECTION 10**

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## **GENERAL PROVISIONS**

### **SECTION 20 – PROPOSAL REQUIREMENTS AND CONDITIONS**

**20-01 NOTICE TO BIDDERS.** An official notice to bidders stating the time and place for the submission of sealed proposals on designated projects or proposed work. This notice shall contain a description of the proposed work, instructions to the bidder regarding proposal forms, proposal guaranty, Plans, Specifications, and the reservation of the right of the Owner to reject any or all bids.

- a. **General.** Bids will be asked for in an advertisement for bids as set forth by State laws. The advertisement will contain a description of the Project; the place, date, and hour of opening; approximate estimates of the various quantities and kinds of work to be performed or materials to be furnished; a stipulation as to the character and amount of the Proposal Bond; and instructions to Bidders as to the access to plans and specifications. The advertisement for bids will become part of the Contract if award is made.
- b. **Quantities.** The quantities shown in the advertisement for bids are to be considered as approximate only and may be amended to include additional quantities or additional items, or may be amended to decrease quantities or exclude items of work before bids are to be received.
- c. **Corrections.** Corrections and minor changes in the advertisement for bids, and Proposal form may be put into effect at any time prior to the hour fixed for opening of bids by telegram, certified or registered letter from the Engineer, notifying all prospective Bidders to whom Proposal forms have been previously issued.
- d. **Owner's Rights.** The Owner reserves the right to reject any and all bids.

**20-02 PREQUALIFICATION OF BIDDERS.** Each bidder shall furnish the owner satisfactory evidence of his/her competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the owner satisfactory evidence of his/her financial responsibility. Such 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 Contractor'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 his/her 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 his/her (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 he is prequalified with the State Highway Division and is on the current "bidder's list" of the state in which the proposed work is located. Such evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports hereinbefore specified.

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 shall furnish bidders with proposal forms. All papers bound with or attached to the proposal forms are necessary parts and must not be detached.

The plans specifications, and other documents designated in the proposal form shall be considered a part of the proposal whether attached or not.

**20-04 ISSUANCE OF PROPOSAL FORMS.** The Owner reserves the right to refuse to issue a proposal form to a prospective bidder should such bidder be 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. Contractor default under previous contracts with the Owner.
- d. 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 hereinafter provided in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 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. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as 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 as to the conditions to be encountered in performing the work and as to 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 he may make or obtain from his/her 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 his/her proposal on the forms furnished by the Owner. All blank spaces in the proposal forms 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 for which he proposes to do 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 sign his/her proposal correctly and in ink. If the proposal is made by an individual, his/her 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 under the laws of which 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 his/her authority to do so and that the signature is binding upon the firm or corporation.

**20-08 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.

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.

**20-09 BID GUARANTEE.** Each separate proposal shall be accompanied by a certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such check, or collateral, shall be made payable to the Owner.

**20-10 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 before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

**20-11 WITHDRAWAL OR REVISION OF PROPOSALS.** A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by telegram 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.

**20-12 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.

**20-13 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 the subsection titled ISSUANCE OF PROPOSAL FORMS of this section.

**END OF SECTION 20**

**GENERAL PROVISIONS**  
**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 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 the subsection titled IRREGULAR PROPOSALS of Section 20.
- b. If the bidder is disqualified for any of the reasons specified in the subsection titled DISQUALIFICATION OF BIDDERS of Section 20.

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

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

Award of the contract shall be made by the Owner to the lowest, qualified bidder whose proposal conforms to the cited requirements of the Owner.

For AIP contracts, unless otherwise specified in this subsection, no award shall be made until the FAA has concurred in the Owner's recommendation to make such award and has approved the Owner's proposed contract to the extent that such concurrence and approval are required by 49 CFR Part 18.

**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 the subsection titled APPROVAL OF CONTRACT of this section.

**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 hereinbefore specified in the subsection titled CONSIDERATION OF PROPOSALS of this section. 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 contracts bonds as specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section.

**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.

The successful bidder shall furnish separated performance and payment bonds each on the full bid amount, unless otherwise specified in the Contract Documents.

**30-06 EXECUTION OF CONTRACT.** The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return such signed contract to the owner, along with the fully executed surety bond or bonds specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder. If the contract is mailed, special handling is recommended.

**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 15 calendar day period specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidation of damages to the Owner.

**END OF SECTION 30**

## **GENERAL PROVISIONS**

### **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 and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. Unless otherwise specified herein, the Engineer shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost or the total cost of any major contract item by more than 25 percent (total cost being based on the unit prices and estimated quantities in the awarded contract). Alterations that do not exceed the 25 percent limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations as if the altered work had been a part of the original contract. These alterations that are for work within the general scope of the contract shall be covered by “Change Orders” issued by the Engineer. Change orders for altered work shall include extensions of contract time where, in the Engineer’s opinion, such extensions are commensurate with the amount and difficulty of added work.

Should the aggregate amount of altered work exceed the 25 percent limitation hereinbefore specified, such excess altered work shall be covered by supplemental agreement. 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.

For AIP contracts, all supplemental agreements shall be approved by the FAA and/or the FDOT and shall include valid wage determinations of the U.S. Secretary of Labor when the amount of the supplemental agreement exceeds Two Thousand Dollars (\$2,000). However, if the Contractor elects to waive the limitations on work that increases or decreases the originally awarded contract or any major contract item by more than 25 percent, the supplemental agreement shall be subject to the same U.S. Secretary of Labor wage determination as was included in the originally awarded contract.

All supplemental agreements shall require consent of the Contractor’s surety and separate performance and payment bonds.

**40-03 OMITTED ITEMS.** The Engineer may, in the Owner’s best interest, omit from the work any contract item, except major contract items. 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 the subsection titled PAYMENT FOR OMITTED ITEMS of Section 90.

**40-04 EXTRA WORK.** Should acceptable completion of the contract require the Contractor to perform an item of work for which no basis of payment has been provided in the original contract or previously issued change orders or supplemental agreements, the same shall be called "Extra Work." Extra Work that is within the general scope of the contract shall be covered by written change order. Change orders for such 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 Engineer's opinion, is necessary for completion of such Extra Work.

When determined by the Engineer to be in the Owner's best interest, he may order the Contractor to proceed with Extra Work by force account as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of Section 90.

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 hereinbefore defined in the subsection titled SUPPLEMENTAL AGREEMENT of Section 10.

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. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas of the airport with respect to his/her own operations and the operations of all his/her subcontractors as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80. 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 the subsection titled CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS in Section 70.

With respect to his/her own operations and the operations of all his/her 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.

When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office), unless otherwise specified herein. 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.

The Contractor shall make his/her own estimate of all labor, materials, equipment, and incidentals necessary for providing the maintenance of aircraft and vehicular traffic as specified in this subsection.

The cost of maintaining the aircraft and vehicular traffic specified in this subsection shall not be measured or paid for directly, but shall be included in the various contract items.

**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 unless noted otherwise.

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 Engineer shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the Engineer in accordance with the provisions of the contract.

Except as provided in the subsection titled RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK of this section, 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 either embankment or waste, he may at his/her option either:

- a. Use such material in another contract item, providing such use is approved by the Engineer 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 Engineer; or
- c. Use such material for his/her 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., he shall request the Engineer's approval in advance of such use.

Should the Engineer 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 his/her own 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 his/her use of such material so used in the work or removed from the site.

Should the Engineer 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 his/her 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 CLEANING UP.** 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. He 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 such property owner.

**END OF SECTION 40**

## **GENERAL PROVISIONS**

### **SECTION 50 – CONTROL OF WORK**

**50-01 AUTHORITY OF THE ENGINEER.** The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. The Engineer shall decide all questions that may arise as to the interpretation of the specifications or plans relating to the work. The Engineer shall determine the amount and quality of the several kinds of work performed and materials furnished which are to be paid for the under contract.

The Engineer does not have the authority to accept pavements that do not conform to FAA 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 Engineer 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 his/her opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, he will advise the Owner of his/her determination that the affected work be accepted and remain in place. In this event, the Engineer will document his/her 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. The Engineer's determination and recommended contract price adjustments will be based on good engineering judgment and such tests or retests of the affected work as are, in his/her opinion, needed. Changes in the contract price shall be covered by contract modifications (change order or supplemental agreement) as applicable.

If the Engineer 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 Engineer's written orders.

For the purpose of this subsection, 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 Engineer's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's prosecution of the work, when, in the Engineer's opinion, such compliance is essential to provide an acceptable finished portion of the work.

For the purpose of this subsection, the term "reasonably close conformity" is also intended to provide the Engineer with the authority, after consultation with the FAA, to use good engineering judgment in his/her determinations as to acceptance of work that is not in strict conformity but will provide a finished product equal to or better than that intended by the requirements of the contract, plans and specifications.

For AIP contracts, the *Engineer shall advise the Sponsor, who shall* keep the FAA advised of the Engineer's determinations as to acceptance of work that is not in reasonably close conformity to the contract, plans, and specifications. Change orders or supplemental agreements must bear the written approval of the FAA. The Engineer may consult with the FAA for the determination to accept materials that are not in strict conformance with the specification requirements.

The Engineer 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. 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, *contract special provisions*, plans, cited standards for materials or testing, and cited FAA advisory circulars; *contract special provisions shall govern over contract general provisions, plans, cited standards for materials or testing, and cited FAA advisory circulars*; contract general provisions shall govern over plans, cited standards for materials or testing, and cited FAA advisory circulars; plans shall govern over cited standards for materials or testing and cited FAA advisory circulars. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited standards for testing occur due to the timing of changing, editing, and replacing of standards. In the event the Contractor discovers any apparent discrepancy within standard test methods, he shall immediately call upon the Engineer for his/her 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, he shall immediately call upon the Engineer for his/her interpretation and decision, and such decision shall be final.

**50-04 COOPERATION OF CONTRACTOR.** The Contractor will be supplied with five copies each of the plans and specifications. He shall have available on the work at all times one copy each of the plans and specifications. Additional 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 he shall cooperate with the Engineer and his/her 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 his/her 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 Engineer or his/her authorized representative.

**50-05 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 his/her work so as 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 his/her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced by him because of the presence and operations of other Contractors working within the limits of the same project.

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

**50-06 CONSTRUCTION LAYOUT AND STAKES.** The Engineer shall establish horizontal and vertical control only. The Contractor must establish all layout required for the construction of the work. Such stakes and markings as the Engineer may set for either his/her own or the Contractor's guidance shall be preserved by the Contractor. In case of negligence on the part of the Contractor, or his/her employees, resulting in the destruction of such stakes or markings, an amount equal to the cost of replacing the same may be deducted from subsequent estimates due the Contractor at the discretion of the Engineer.

The Contractor will be required to furnish all lines, grades and measurements from the control points necessary for the proper prosecution and control of the work contracted for under these specifications.

The Contractor must give weekly copies of the survey notes to the Engineer so that the Engineer may check them as to accuracy and method of staking. All areas that are staked by the Contractor must be checked by the Engineer prior to beginning any work in the area. The Engineer will make periodic checks of the grades and alignment set by the Contractor. In case of error on the part of the Contractor, or his/her employees, resulting in establishing grades and/or alignment that are not in accordance with the plans or established by the Engineer, all construction not in accordance with the established grades and/or alignment shall be replaced without additional cost to the Owner.

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

Construction Staking and Layout includes but is not limited to:

1. Clearing and Grubbing perimeter staking.
2. Rough Grade slope stakes at 100-foot stations.
3. Drainage Swales slope stakes and flow line blue tops at 50-foot stations.
4. Subgrade blue tops at 25-foot stations and 25-foot offset distance (max.) for the following section locations:
  - a. Runway – minimum 5 per station
  - b. Taxiways – minimum 3 per station
  - c. Holding apron areas – minimum 3 per station

- d. Roadways – minimum 3 per station
5. Base Course blue tops at 25 foot stations and 25-foot offset distance (max.) for the following section locations:
  - a. Runway – minimum 5 per station
  - b. Taxiways – minimum 3 per station
  - c. Holding apron areas – minimum 3 per station
6. Pavement areas:
  - a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100-foot stations
  - b. Between Lifts at 25-foot stations for the following section locations:
    - i. Runways – each paving lane width
    - ii. Taxiways – each paving lane width
    - iii. Holding areas – each paving lane width
  - c. After finish paving operations at 50-foot stations
    - i. All paved areas – Edge of each paving lane prior to next paving lot
  - d. Shoulder and safety area blue tops at 50-foot stations and at all break points with maximum of 50 foot offsets
7. Fence lines at 100-foot stations
8. Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, VASIs, PAPIs, REILs, Wind Cones, Distance Markers (signs), pull boxes and manholes.
9. Drain lines, cut stakes and alignment on 25-foot stations, inlet and manholes.
10. Painting and Striping layout (pinned with 1.5 in PK nails) marked for paint Contractor. (All nails shall be removed after painting)
11. Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet per pass (that is, paving lane).

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

**50-07 AUTOMATICALLY CONTROLLED EQUIPMENT.** Whenever batching or mixing plant equipment is required to be operated automatically under the contract and a breakdown or malfunction of the automatic controls occurs, the equipment may be operated manually or by other methods for a period *forty-eight (48)* hours following the breakdown or malfunction, provided this method of operations will produce results which conform to all other requirements of the contract.

**50-08 AUTHORITY AND DUTIES OF INSPECTORS.** Inspectors employed by the Owner *and/or the Engineer on behalf of the Owner* shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

Inspectors employed by the Owner *and/or Engineer on behalf of the Owner* are authorized to notify the Contractor or his/her 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 Engineer for his/her decision.

**50-09 INSPECTION (OBSERVATION) OF THE WORK.** All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer 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 Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the Owner may be ordered removed and replaced at the Contractor's expense unless the Owner's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the Owner, *in terms of this Project*, 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 Engineer as provided in the subsection titled CONFORMITY WITH PLANS AND SPECIFICATIONS of this section.

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 the subsection titled CONTRACTOR'S RESPONSIBILITY FOR WORK of Section 70.

No removal work made under provision of this subsection shall be done without lines and grades having been given by the Engineer. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans or as given, 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 forthwith with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs (incurred by the Owner) from any monies due or to become due 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 shall be responsible for all damage done by his/her hauling equipment and shall correct such damage at his/her own expense.

**50-12 MAINTENANCE DURING CONSTRUCTION.** The Contractor shall maintain the work during construction and until the work is accepted. This 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 the subsection titled MAINTENANCE DURING CONSTRUCTION of this section, the Engineer 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 Engineer'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 deducted from monies due or to become due the Contractor.

**50-14 PARTIAL ACCEPTANCE.** If at any time during the prosecution of the project the Contractor substantially completes a usable unit or portion *and/or phase* of the work, the occupancy of which will benefit the Owner, he may request the Engineer to make final inspection of that unit *or phase*. If the Engineer finds upon inspection that the unit *or phase* has been satisfactorily completed in compliance with the contract, he may *recommend that the Owner* accept it as being completed, and the Contractor may be relieved of further responsibility for that unit *or phase*. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

*Such Partial Acceptance may be requested or required prior to the Owner and Engineer having full and complete opportunity to adequately evaluate the usable unit or portion and/or phase of work for compliance with the contract documents. In such a case, the Owner may accept the area for temporary use however, the Contractor will not be relieved of further responsibility for*

*that unit or phase. Such temporary use of unit or portion and/or phase of work shall be for a defined period of time then returned to the Contractor for continued work toward substantial completion.*

**50-15 FINAL ACCEPTANCE.** Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be completed in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The Engineer 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 Engineer will give the Contractor the necessary instructions for correction of same and the Contractor shall immediately comply with and execute such instructions. 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 Engineer 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 him for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, he shall notify the Engineer in writing of his/her intention to claim such additional compensation before he begins the work on which he bases the claim. If such notification is not given or the Engineer 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 Engineer 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 his/her written claim to the Engineer 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 WARRANTY AND GUARANTEE.** *The Contractor warrants to the Owner that all materials furnished under this Contract shall be new unless specified and defects and in conformance with Contract requirements. Any work not so conforming to these standards may be considered defective.*

*If, within one (1) year after the date of final acceptance of the work, or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract, any of the work is found to be defective or not in accordance with Contract requirements, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so.*

*The obligations of the Contractor in this paragraph titled WARRANTY AND GUARANTEE shall be in addition to and not in limitation of any obligations imposed upon him by special guarantees required by the Contract or otherwise prescribed by law.*

**50-18 CONCEALED CONDITIONS.** *Should conditions encountered below the surface of the ground or should concealed or unknown conditions in an existing structure vary to an unreasonable extent from the conditions indicated by the drawings and Specifications, the Engineer shall be notified by the Contractor and instructions shall be equitably adjusted upon claim of either party made within thirty (30) days after the first observation of the conditions if shown on the drawings or attached to these Specifications, are presented only as information that is available indicating certain conditions found and limited to the exact locations and dates shown. Neither the Owner nor the Engineer shall be responsible for making the determination of water table variations prior to bidding and shall not assume that any water levels shown by the aforesaid core boring data will necessarily be maintained at the level indicated.*

**50-19 RECORD SET DRAWINGS.** *The Contractor shall, without additional cost, keep a separate copy of all Specifications, drawings, addenda, modifications, and shop drawings at the site in good order and annotated currently to show all changes made during the construction process. These shall be available to the Engineer for review of record information thereon each month prior to approval of monthly application for payment, and shall be delivered to him for the Owner upon completion of the Project.*

*Record information shall include but not be limited to record dimensions, finished pavement grades, finished elevations of structures, record inverts, etc.*

*The Contractor shall, without additional cost, furnish to the Owner three (3) complete sets of all maintenance manuals, parts lists, and operating instructions covering materials, equipment and installations having moving parts. It is mandatory that all of the aforesaid be delivered at the same time and with the materials, equipment, and installations, so that proper installation and operation can be promptly made.*

**END OF SECTION 50**

## **GENERAL PROVISIONS**

### **SECTION 60 – CONTROL OF MATERIALS**

**60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS.** The materials used on 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 complete statements to the Engineer as to the origin, composition, and manufacture of all materials to be used in the work. Such statements shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the Engineer's option, materials may be approved at the source of supply before delivery is stated. 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.

The Contractor shall furnish airport lighting equipment that conforms to the requirements of cited materials specifications. In addition, where an FAA specification for airport lighting equipment is cited in the plans or specifications, the Contractor shall furnish such equipment that is:

- a. Listed in FAA Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program, and Addendum that is in effect on the date of advertisement; and,
- b. Produced by the manufacturer as listed in the Addendum cited above for the certified equipment part number.

Airport lighting equipment, if any, required for this Contract and to be furnished by the Contractor in accordance with this subsection, is listed by equipment name, cited FAA specification, and effective FAA Advisory Circular or approval letter for equipment and manufacturer in the Special Provisions of this Contract.

**60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS.** Unless otherwise designated, all materials used in the work shall be inspected, tested, and approved by the Engineer before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Engineer 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 Engineer, shall be removed at the Contractor's expense.

Unless otherwise designated, tests in accordance with the cited standard methods of ASTM, AASHTO, Federal Specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids, will be made by and at the expense of the Engineer.

The testing organizations performing on site field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel, including the Contractor's representative at his/her request. Unless otherwise designated, samples will be taken by a qualified representative of the Engineer. 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 his/her request.

The Contractor shall employ a testing organization to perform all Contractor required tests. The Contractor shall submit to the Engineer resumes on all testing organizations and individual persons who will be performing the tests. The Engineer will determine if such persons are qualified. All the test data shall be reported to the Engineer after the results are known. A legible, handwritten copy of all test data shall be given to the Engineer 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 Engineer showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

**60-03 CERTIFICATION OF COMPLIANCE.** The Engineer may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance 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.

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 Engineer.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name," 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.

Should the Contractor propose to furnish an "or equal" material or assembly, he shall furnish the manufacturer's certificates of compliance as hereinbefore described for the specified brand name material or assembly. However, the Engineer shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

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

**60-04 PLANT INSPECTION.** The Engineer or his/her 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 his/her acceptance of the material or assembly.

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

- a. The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom he has contracted for materials.
- b. The Engineer 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 Engineer, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located 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 Engineer 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'S FIELD OFFICE AND LABORATORY.** *When specified and provided for as a contract item, the Contractor shall furnish for the duration of the project one building for the exclusive use of the Engineer use of the field engineers and inspectors, as a field office. This facility shall be an approved weatherproof building meeting the current State Highway Specifications (for example, Class I Field Office or Type C Structure). This building shall be located conveniently near to the construction and shall be separate from any building used by the Contractor. The building shall be furnished and maintained by the Contractor as specified herein and shall become property of the Contractor when the contract work is completed. See the Special Provisions for additional information concerning this item. A land line telephone and answering machine shall be provided. The Contractor shall be responsible for payment of the basic monthly charge and local calls only. Any Long Distance Tolls shall be the responsibility of the caller. The Contractor shall furnish [ FAX machine, photocopy machine, water, sanitary facilities, heat, air conditioning, and electricity ]. No direct payment will be made for this building or labor, materials, ground rental, or other expense in connection therewith. The cost hereof shall be included in the price bid for the various items of the contract. The Contractor and his/her superintendent shall provide all reasonable facilities to enable to the Engineer to inspect the workmanship and materials entering into the work.*

**60-06 STORAGE OF MATERIALS.** Materials shall be so stored as 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 so as to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Engineer. 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, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Engineer. 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 Engineer 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 his/her entire expense, except as otherwise agreed to (in writing) by the owner or lessee of the property.

*The risk of loss of or damage to stored materials shall be at all times solely the Contractor's.*

**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 Engineer.

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 Engineer 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 herein (if any) to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified herein.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished 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.

**60-09 REVIEW AND ACCEPTANCE OF MATERIALS.** *The Contractor shall furnish to the Engineer, for review, all Contractor's subcontractor's and manufacturer's drawings, which shall be deemed to include shop material lists and performance data, which may be required by the Specifications, requested by the Engineer or otherwise necessary for the writing call the Engineer's attention to any deviations that the shop drawings may have from the requirements of the Contract documents.*

*Where called for, the Contractor shall furnish two samples of each material, texture, color, etc., clearly labeled as to name and quality of material, manufacturer and job application.*

*No work requiring a shop drawing or sample submission shall be started until the submission has been reviewed by the Engineer.*

*The Engineer's review of shop drawings or samples will not relieve the Contractor from his responsibility for any deviations from the requirements of the Contract documents unless the Contractor has in writing called the Engineer's attention to such deviations at the time of submission and the Engineer has given written comments on the specific deviation, nor will it relieve the Contractor from errors or omissions in the shop drawings.*

## END OF SECTION 60

**GENERAL PROVISIONS**  
**SECTION 70 – LEGAL REGULATIONS**  
**AND 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. He 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 his/her 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 himself or his/her 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 prosecution 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, he shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the surety shall indemnify and save 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 prosecution 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 as follows:

Except as listed *in the Project Plans or in the Contract documents*, 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 Engineer.

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 so as 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 Engineer, 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 AID PARTICIPATION.** For AIP/FM contracts, the United States Government (*FAA*) and/or the State of Florida (*FDOT*) have agreed to reimburse the Owner for some portion of the contract costs. Such reimbursement is made from time to time upon the Owner's request to the *FAA/FDOT*. In consideration of the United States Government's (*FAA's*) and/or State of Florida (*FDOT's*) agreement with the Owner, the Owner has included provisions in this contract pursuant to the requirements of Title 49 of the United States Code (*USC*) and the Rules and Regulations of the *FAA* and/or the *Joint Participation Agreement (JPA)* that pertain to the work.

As required by the *USC/JPA*, the contract work is subject to the inspection and approval of duly authorized representatives of the Administrator, *FAA/JPA*, and is further subject to those provisions of the rules and regulations that are cited in the contract, plans, or specifications.

No requirement of the *USC/JPA*, the rules and regulations implementing the *USC/JPA*, or this contract shall be construed as making the Federal Government/*State of Florida* 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 shall provide and maintain in a neat, sanitary condition such accommodations for the use of his/her employees as may be necessary to comply with the requirements of the state and local Board of Health, or of other bodies or tribunals having jurisdiction.

Attention is directed to Federal, state, and local laws, rules and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to his/her health or safety.

**70-07 PUBLIC CONVENIENCE AND SAFETY.** The Contractor shall control his/her operations and those of his/her 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 his/her own operations and those of his/her subcontractors and all suppliers in accordance with the subsection titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80 hereinafter.

**70-08 BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS.** The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs, and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area shall be a maximum of 18 in high. Unless otherwise specified, barricades shall be spaced not more than 25 feet apart. *Unless otherwise specified*, Barricades, warning signs, and markings shall be paid for under Section 40-05.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual

of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office).

When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and associated lighting conforming to the requirements of AC 150/5340-1, Standards for Airport Markings.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stock piles, and his/her parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to AC 150/5370-2, Operational Safety on Airports During Construction.

The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to AC 150/5370-2.

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards prior to commencing work that requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their dismantling is directed by the Engineer.

Open-flame type lights shall not be permitted within the air operations areas of the airport.

**70-09 USE OF EXPLOSIVES.** When the use of explosives is necessary for the prosecution 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 Engineer 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 his/her 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 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 prosecution of the work, resulting from any act, omission, neglect, or misconduct in his/her manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have 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, he shall restore, at his/her own 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 he shall make good such damage or injury in an acceptable manner.

**70-11 RESPONSIBILITY FOR DAMAGE CLAIMS.** The Contractor shall indemnify and save harmless the Engineer and the Owner and their officers, 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 his/her contract as may be considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, his/her surety may be held until such suits, actions, or claims for injuries or damages as aforesaid 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 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 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.** Should it be 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 shall be specified herein and indicated on the plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified. The Contractor shall make his/her own estimate of the difficulties involved in arranging his/her work to permit such beneficial occupancy *and/or operational capability* by the Owner as described *in the Plans and Contract documents*.

Upon completion of any portion of the work listed above, such portion shall be accepted by the Owner in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50.

No portion of the work may be opened by the Contractor for public use until ordered by the Engineer in writing. Should it become necessary to open a portion of the work to public traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the Engineer, 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 his/her expense.

The Contractor shall make his/her 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.

Contractor shall be required to conform to safety standards contained AC 150/5370-2, Operational Safety on Airports During Construction (See Special Provisions.)

Contractor shall refer to the approved safety plan to identify barricade requirements and other safety requirements prior to opening up sections of work to traffic.

**70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK.** Until the Engineer's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50, 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 his/her 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, seedings, and soddings furnished under his/her 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 the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section, 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 his/her 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 the owners are indicated *in the Plans, Special Provisions or General Notes.*

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 his/her responsibility to protect such existing features from damage or unscheduled interruption of service.

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 his/her plan of operations. Such notification shall be in writing addressed to THE PERSON TO CONTACT as provided hereinbefore in this subsection and the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section. A copy of each notification shall be given to the Engineer.

In addition to the general written notification hereinbefore provided, it shall be the responsibility of the Contractor to keep such individual owners advised of changes in his/her plan of operations that would affect such owners.

Prior to commencing the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such owner of his/her 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 Engineer.

The Contractor's failure to give the two days' notice hereinabove provided 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 excavation methods acceptable to the Engineer within 3 feet (90 cm) 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, he shall immediately notify the proper authority and the Engineer 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 Engineer 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 his/her operations whether or not 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 his/her 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 prosecution 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 notify the above named FAA Airway Facilities Point-of-Contact 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 prosecution of the project work requires a facility outage, the Contractor shall contact the above named FAA Point-of-Contact a minimum of 48 hours prior to the time of the required outage.
- d. If prosecution of the project work results in damages to existing FAA equipment or cables, the Contractor shall repair the damaged item in conformance with FAA Airway Facilities' standards to the satisfaction of the above named FAA Point-of-Contact.
- e. If the project work requires the cutting or splicing of FAA owned cables, the above named FAA Point-of-Contact shall be contacted a minimum of 48 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA Airway Facilities 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 Airway Facilities' specifications and require approval by the above named FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA Airway Facilities restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA Airway Facilities, 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 to him by this contract, there shall be no liability upon the Engineer, his/her 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 his/her surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill his/her 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. He shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils,

bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

*In the event of conflict between Federal, State or local laws, codes, ordinances, rules and regulations concerning pollution control, the most restrictive applicable ones shall apply.*

*The Contractor shall pay special attention to the pollution control requirements of the several specifications. Work items which may cause excessive pollution and shall be closely controlled by the Contractor are:*

- 1. Clearing, grubbing, burning or other disposal.*
- 2. Stripping, excavation, and embankment.*
- 3. Drainage and ditching.*
- 4. Aggregate production, handling and placing.*
- 5. Cement, lime or other stabilization.*
- 6. Concrete and bituminous materials handling, production, and paving.*
- 7. Seeding, fertilizing, mulching and use of herbicides or insecticides.*
- 8. Contractor's own housekeeping items; haul roads; sanitary facilities; water supply; equipment fueling, servicing and cleaning; job clean up and disposal.*

*When the Contractor submits his tentative progress schedule in accordance with PROSECUTION and PROGRESS, Section 80, he shall also submit for acceptance of the Engineer, his schedules for accomplishment of temporary and permanent erosion control work, as are applicable for clearing, grading, structures at watercourses, construction, and paving, and his proposed method of erosion control schedules and methods of operations have been accepted by the Engineer.*

*All bituminous and Portland cement concrete proportioning plants shall meet state requirements.*

*The following listed stipulations shall apply to this Contract unless more restrictive ones are specified by the Plans, special provisions, laws, codes, ordinance, etc. Cost of pollution control shall be incidental to the appropriate work items unless otherwise specified.*

- 1. Control of Water Pollution and Siltation.*
  - a. All work of water pollution and siltation control is subject to inspection by the local and/or state governmental enforcing agent.*
  - b. All applicable regulations of fish and Wildlife agencies and statues relating to the prevention and abatement of pollution shall be complied with in the performance of the Contract.*
  - c. Construction operations shall be conducted in such manner as to reduce erosion to the practicable minimum and to prevent damaging siltation of watercourses, streams, lakes or reservoirs. The surface area of erodible land, either on or off the airport site, exposed to the elements by clearing, grubbing or grading operations, including gravel pits, waste or disposal areas and haul roads, at any time, for this Contract, shall be subject to approval of the Engineer and the duration of such exposure prior to final trimming and finishing of the areas shall have full authority to order the suspension of grading and other operations pending adequate and proper performance of trimming, finishing and*

*maintenance work or to restrict the area of erodible land exposed to the elements.*

- d. Materials used for permanent erosion control measures shall meet the requirements of the applicable Specifications. Gravel or stone, consisting of durable particles of rock and containing only negligible quantities of fines, shall be used for construction pads, haul roads and temporary roads in or across streams.*
- e. Where called for on the Plans, a stilling basin shall be constructed to prevent siltation in the stream from construction operations.*
- f. The disturbance of lands and waters that are outside the limits of construction as staked is prohibited, except as found necessary and approved by the Engineer.*
- g. The Contractor shall conduct his work in such manner as to prevent the entry of fuels, oils, bituminous materials, chemicals, sewage or other harmful materials into streams, rivers, lakes or reservoirs.*
- h. Water from aggregate washing or other operations containing sediment shall be treated by filtration, by use of a settling basin or other means to reduce the sediment content to a level acceptable to the local and/or state governmental enforcing agent.*
- i. All waterways shall be cleared as soon as practicable of falsework, piling, debris or other obstructions placed during construction operations and not a part of the finished work. Care shall be taken during construction and removal of such barriers to minimize the muddying of a stream.*
- j. The Contractor shall care for the temporary erosion and siltation control measures during the period that the temporary measures are required and for the permanent erosion control measures until the Contract has been completed and accepted. Such care shall consist of the repair of areas damaged by erosion, wind, fire or other causes.*
- k. Permanent and temporary erosion control work that is damaged due to the Contractor's operations or where the Work required is attributed to the Contractor's negligence, carelessness or failure to install permanent controls at the proper time, shall be repaired at the Contractor's expense*

## *2. Open Burning of Combustible Wastes.*

- a. The Contractor shall obtain a burning permit from local authorities, where applicable, prior to any burning.*
- b. All burning shall conform to the conditions of the permit, except that the conditions herein shall apply if they are more restrictive.*
- c. No tires, oils (except atomized fuels applied by approved equipment), asphalt, paint, or coated metals shall be permitted in combustible waste piles.*
- d. Burning will not be permitted within 1,000 feet of a residential or built-up area nor within 100 feet of any standing timber or flammable growth unless otherwise specified.*
- e. Burning shall not be permitted unless the prevailing wind is away from a nearby town or built-up area.*
- f. Burning shall not be permitted during a local air inversion or other climatic condition as would result in a pall of smoke over a nearby town or built-up area.*
- g. Burning shall not be permitted when the danger of brush or forest fires is made known by Federal, State, or local officials.*

- h. The size and number of fires shall be restricted to avoid the danger of brush or forest fires. Burning shall be done under surveillance of a watchman who shall have fire-fighting equipment and tools readily available.*
- i. Burning shall not be permitted if disallowed by other sections of this specifications or project drawings.*

3. *Control of Other Air Pollutants.*

- a. Minimum possible areas of open grading, borrow or aggregate excavation shall be exposed at one time, consistent with the progress of the Work.*
- b. Grading areas shall be kept at proper moisture conditions.*
- c. Sand or dust blows shall be temporarily mulched, with or without seeding, or otherwise controlled with stabilizing agents.*
- d. Temporary roads, haul routes, traffic or work areas shall be stabilized with dust palliative, penetration asphalt, wood chips, or other approved measures to prevent dust pollution.*
- e. Cements, fertilizers, chemicals, volatiles, etc., shall be stored in proper containers or with proper coverings to prevent accidental discharge into the air.*
- f. Aggregates bins, cement bins, and dry material batch trucks shall be properly covered to prevent loss of material to the air.*
- g. Drilling, grinding and sand blasting apparatus shall be equipped with water, chemical, or vacuum dust controlling systems.*
- h. Applications of chemicals and bitumens shall be held to recommended rates.*
- i. Bituminous mixing plants shall be equipped with dust collectors as noted in the Specifications.*
- j. Quarrying, batching, and mixing operations and the transfer of material between trucks, bins, or stockpiles shall be properly controlled to minimize dust diffusion.*
- k. When necessary, certain operations shall be delayed until proper wind or climatic conditions exist to dissipate or inhibit potential pollutants to the satisfaction of the Engineer.*

**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 his/her operations, any building, part of a building, structure, or object that is incongruous with its surroundings, he shall immediately cease operations in that location and notify the Engineer. The Engineer will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume his/her 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 modification (change order or supplemental agreement) as provided in the subsection titled EXTRA WORK of Section 40 and the subsection titled PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT WORK of Section 90. If appropriate, the contract modification shall include an extension of contract time in accordance with the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of Section 80.

**70-21 WORK ACCESS.** Any haul roads, ditch crossings, storage areas, etc., that the Contractor may require shall be constructed and maintained at the Contractor's expense.

The Contractor shall not use runways, taxiways or other paved areas on the air operations portions of the airport for access to and from the job site unless authorized by the Owner. No equipment or vehicles will be allowed on the air operations portions of the airport except as authorized by the Owner.

Any runways, taxiways or other paved areas damaged by the Contractor's vehicles or equipment shall be repaired by the Contractor at no cost to the Owner.

From time to time when required, the Contractor shall be Contractor's vehicles or equipment and men from along the edge of the runway/taxiway/apron to allow aircraft operations on the pavement.

**70-22 LIENS.** Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the Owner a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required in either case, an affidavit that so far as he has knowledge or information the releases and receipts include all the labor and materials for which a lien could be filed: but the Contractor may, if any Subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Engineer, to indemnify the Owner against any lien. If any lien remains unsatisfied after all payment are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

**70-23 INSURANCE.** The Contractor shall not commence work under this Contract until he has obtained and provided insurance of the character specified in the special provisions which will provide adequate protection to the Owner and the Contractor against all liabilities, damages and accidents, nor shall he commence work until such insurance has been approved by the Owner. Neither approval by the Owner, nor a failure to disapprove insurance furnished by a Contractor shall release the Contractor of full responsibility for liability, damages and accidents as set forth herein. The Contractor shall maintain such required insurance in force during the life of this Contract, and no modification or change in insurance coverage and provisions shall be made without thirty (30) days written advance notice to the Owner.

The Contractor shall furnish certificates of insurance to the Owner prior to commencing any operations under this Contractor, which certificates shall clearly indicate that the Contractor has obtained insurance, in this type, amount and classification, in strict compliance with this subsection.

**70-24 SUBMITTAL OF WAGE RATE SUMMARY.** It shall be a condition of this Contract and shall be made a condition of all Subcontractors entered into pursuant to this Contract, that the Contractor and any Subcontractor will submit to the Owner weekly, one copy of the Summary of Wage Rates.

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## **GENERAL PROVISIONS**

### **SECTION 80 – PROSECUTION 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 Engineer.

Should the Contractor elect to assign his/her 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. In case of approval, the Contractor shall file copies of all subcontracts with the Engineer.

The Contractor shall perform, with his organization, an amount of work equal to at least 33.33 percent of the total contract cost.

**80-01.1 PRE-CONSTRUCTION CONFERENCE.** After the award of the Contract and prior to the issuance of the "Notice to Proceed", a conference will be held to discuss the "Notice to Proceed" date, to establish procedures for handling shop drawings and other submissions and for processing applications for payment, and to establish a working understanding between the parties as to the project.

**80-02 NOTICE TO PROCEED.** The notice to proceed shall state the date on which it is expected the Contractor will begin the construction and from which date contract time will be charged. The Contractor shall begin the work to be performed under the contract within 10 days of the date set by the Engineer in the written notice to proceed, but in any event, the Contractor shall notify the Engineer at least 24 hours in advance of the time actual construction operations will begin. *Day count will begin on the date of Notice to Proceed whether the Contractor begins work or not.*

**80-03 PROSECUTION AND PROGRESS.** Unless otherwise specified, the Contractor shall submit his/her progress schedule for the Engineer's approval within 10 days after the effective date of the notice to proceed. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the work. 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 Engineer's request, submit a revised schedule for completion of the work within the contract time and modify his/her operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the work be discontinued for any reason, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations. *The Contractor shall not commence any work prior to the date set forth in the Notice to Proceed.*

~~For AIP contracts, the Contractor shall not commence any actual construction prior to the date on which the notice to proceed is issued by the Owner.~~

**80-04 LIMITATION OF OPERATIONS.** The Contractor shall control his/her operations and the operations of his/her subcontractors and all suppliers so as 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 his/her operations within an AOA of the airport, the work shall be coordinated with airport operations (through the Engineer) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the Engineer and until the necessary temporary marking and associated lighting is in place as provided in the subsection titled BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS of Section 70.

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 hereinafter specified; immediately obey all instructions to vacate the AOA; 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 the satisfactory conditions are provided.

Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction (See Special Provisions).

**80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION.** All Contractors' operations shall be conducted in accordance with the project safety plan and the provisions set forth within the current version of Advisory Circular 150/5370-2. The safety plan included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a plan that details how it proposes to comply with the requirements presented within the safety plan.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks of the safety plan measures 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 safety plan and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved safety plan unless approved in writing by the Owner or Engineer.

**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 and, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed

forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the Engineer.

Should the Contractor fail to remove such persons or person, or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Engineer 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 be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from 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 others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than specified in the contract, he may request authority from the Engineer 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 Engineer 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 Engineer 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 subsection.

**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 as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the prosecution of the work, or for such time as is 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 Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Engineer within the time period stated in the Engineer's order to resume work. The Contractor shall submit with his/her claim information substantiating the amount shown on the claim. The Engineer 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, for

suspensions made at the request of the Owner, or for any other delay provided for in the contract, plans, or specifications.

If it should become 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. He shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

**80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME.** The number of calendar or working days allowed for completion of the work shall be stated in the proposal and contract and shall be known as the CONTRACT TIME.

Should the contract time require extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

a. CONTRACT TIME based on WORKING DAYS shall be calculated weekly by the Engineer. The Engineer will furnish the Contractor a copy of his/her 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 Engineer shall base his/her weekly statement of contract time charged on the following considerations:

- (1) No time shall be charged for days on which the Contractor is unable to proceed with the principal item of work under construction at the time for at least 6 hours with the normal work force employed on such principal item. Should the normal work force be on a double-shift, 12 hours shall be used. Should the normal work force be on a triple-shift, 18 hours shall apply. Conditions beyond the Contractor's control such as strikes, lockouts, unusual delays in transportation, temporary suspension of the principal item of work under construction or temporary suspension of the entire work which have been ordered by the Owner for reasons not the fault of the Contractor, shall not be charged against the contract time.
- (2) The Engineer will not make charges against the contract time prior to the effective date of the notice to proceed.
- (3) The Engineer will begin charges against the contract time on the first working day after the effective date of the notice to proceed.
- (4) The Engineer will not make charges against the contract time after the date of final acceptance as defined in the subsection titled FINAL ACCEPTANCE of Section 50.
- (5) The Contractor will be allowed 1 week in which to file a written protest setting forth his/her objections to the Engineer'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 subsection titled INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES of Section 20. 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.

b. 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 nonwork days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

c. When the contract time is a specified completion date, it shall be the date on which all contract work shall be substantially completed.

If the Contractor finds it impossible for reasons beyond his/her control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the contract time as extended, make a written request to the Engineer for an extension of time setting forth the reasons which he believes will justify the granting of his/her request. Requests for extension of time on calendar day projects, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded which could normally be expected during the contract period. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may extend the time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

**80-08 FAILURE TO COMPLETE ON TIME.** For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section) the sum specified in the contract and proposal as liquidated damages will be deducted from any money due or to become due the Contractor or his/her 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 his/her contract. *See the Special Provisions for a schedule of liquidated damages.*

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

**80-09 DEFAULT AND TERMINATION OF CONTRACT.** The Contractor shall be considered in default of his/her 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 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 prosecution 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 him 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 Engineer consider the Contractor in default of the contract for any reason hereinbefore, he 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 Engineer 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 prosecution 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 Engineer 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 prosecution 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 Engineer.

Termination of the contract or a portion thereof shall neither relieve the Contractor of his/her responsibilities for the completed work nor shall it relieve his/her 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 Engineer 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 his/her work in such a manner as to insure safety and a minimum of hindrance to flight operations. All Contractor equipment and material stockpiles shall be stored *in location(s) shown in the plans*. No equipment will be allowed to park within the approach area of an active runway at any time.

**END OF SECTION 80**

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**GENERAL PROVISIONS**  
**SECTION 90 – MEASUREMENT AND PAYMENT**

**90-01 MEASUREMENT OF QUANTITIES.** All work completed under the contract will be measured by the Engineer, or his/her authorized representatives, using United States Customary Units of Measurement or the International System of Units.

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 sq ft (0.8 square meter) 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 Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

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.

In computing volumes of excavation the average end area method or other acceptable methods will be used.

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 in.

The term “ton” will mean the short ton consisting of 2,000 lb (907 kg) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designed by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, 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.

When requested by the Contractor and approved by the Engineer 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 Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at 60 °F (15 °C) or will be corrected to the volume at 60 °F (15 °C) using ASTM D 1250 for asphalts or ASTM D 633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, may be used for computing quantities.

Cement will be measured by the ton (kg) or hundredweight (km).

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.

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.

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 by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account work as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of this section.

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 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.

Scales shall be accurate within one-half percent of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector 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 one-tenth of 1 percent of the nominal rated capacity of the scale, but not less than 1 pound (454 grams). The use of spring balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector 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.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales “overweighing” (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of one-half of 1 percent.

In the event inspection reveals the scales have been underweighing (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

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 Engineer. 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 prosecution thereof, subject to the provisions of the subsection titled NO WAIVER OF LEGAL RIGHTS of Section 70.

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 the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 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 his/her unbalanced allocation of overhead and profit among the contract items, or from any other cause.

**90-04 PAYMENT FOR OMITTED ITEMS.** As specified in the subsection titled OMITTED ITEMS of Section 40, the Engineer 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 Engineer 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 Engineer's order to omit or nonperform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Engineer'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 Engineer'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 AND FORCE ACCOUNT WORK.** Extra work, performed in accordance with the subsection titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work. When the change order or supplemental agreement authorizing the extra work requires that it be done by force account, such force account shall be measured and paid for based on expended labor, equipment, and materials plus a negotiated and agreed upon allowance for overhead and profit.

- a. **Miscellaneous.** No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- b. **Comparison of Record.** The Contractor and the Engineer shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor and the Engineer or their duly authorized representatives.
- c. **Statement.** No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with duplicate itemized statements of the cost of such force account work detailed as follows:
  - (1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.
  - (2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - (3) Quantities of materials, prices, and extensions.
  - (4) Transportation of materials.
  - (5) Cost of property damage, liability and workman's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by a receipted invoice for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the

invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

**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 Engineer, 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 the subsection titled PAYMENT FOR MATERIALS ON HAND of this section. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. The Owner must ensure prompt and full payment of retainage from 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.

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 until the final payment is made, except as may be provided (at the Contractor's option) in the subsection titled PAYMENT OF WITHHELD FUNDS of this section. The balance (90 percent) of the amount payable, less all previous payments, shall be certified for payment. Should the Contractor exercise his/her option, as provided in the subsection titled PAYMENT OF WITHHELD FUNDS of this section, no such percent retainage shall be deducted.

When at least 95 percent of the work has been completed, the Engineer 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 Engineer 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 the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section.

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 Engineer at or on an approved site.
- b. The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the Engineer 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 so stored or stockpiled.
- e. The Contractor has furnished the Owner evidence that the material so 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 his/her 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 subsection.

**90-08 PAYMENT OF WITHHELD FUNDS.** At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in subsection 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 the subsection titled FINAL ACCEPTANCE of Section 50, the Engineer will prepare the final estimate of the items of work actually performed. The Contractor shall approve the Engineer's final estimate or advise the Engineer of his/her 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 Engineer 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 Engineer's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the Engineer'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 the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

After the Contractor has approved, or approved under protest, the Engineer's final estimate, 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 the subsection titled CLAIMS FOR ADJUSTMENTS AND DISPUTES of Section 50 or under the provisions of this subsection, 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.

**END OF SECTION 90**

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## **GENERAL PROVISIONS**

### **SECTION 100 – CONTRACTOR QUALITY CONTROL (QC) PROGRAM**

**100-01 GENERAL.** When the specification requires a Contractor Quality Control Program, the Contractor shall establish, provide, and maintain an effective Quality Control Program 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 herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

- a. Adequately provide for the production of acceptable quality materials.
- b. Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
- c. Allow the Contractor as much latitude as possible to develop his or her own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, his/her understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

#### **100-02 DESCRIPTION OF PROGRAM.**

**a. General Description.** The Contractor shall establish a Quality Control Program to perform inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program 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 quality control.

**b. Quality Control Program.** The Contractor shall describe the Quality Control Program in a written document that shall be reviewed by the Engineer prior to the start of any production, construction, or off-site fabrication. **The written Quality Control Program shall be submitted to the Engineer for review at least 5 calendar days before the start of work.**

The Quality Control Program shall be organized to address, as a minimum, the following items:

- a. Quality control organization
- b. Project progress schedule
- c. Submittals schedule
- d. Inspection requirements
- e. Quality control testing plan
- f. Documentation of quality control activities
- g. Requirements for corrective action when quality control and/or acceptance criteria are not met

The Contractor is encouraged to add any additional elements to the Quality Control Program that he/she deems necessary to adequately control all production and/or construction processes required by this contract.

**100-03 QUALITY CONTROL ORGANIZATION.** The Contractor Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, 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 Quality Control Program, the personnel assigned shall be subject to the qualification requirements of paragraph 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization. The quality control organization shall consist of the following minimum personnel:

- a. **Program Administrator.** The Program Administrator shall be a full-time employee of the Contractor, or a consultant engaged by the Contractor. The Program Administrator shall have a minimum of 5 years of experience in airport and/or highway construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

Additional qualifications for the Program Administrator shall include at least 1 of the following requirements:

- (1) Professional engineer with 1 year of airport paving experience acceptable to the Engineer.
- (2) Engineer-in-training with 2 years of airport paving experience acceptable to the Engineer.
- (3) An individual with 3 years of highway and/or airport paving experience acceptable to the Engineer, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.
- (4) Construction materials technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).
- (5) Highway materials technician certified at Level III by NICET.

- (6) Highway construction technician certified at Level III by NICET.
- (7) A NICET certified engineering technician in Civil Engineering Technology with 5 years of highway and/or airport paving experience acceptable to the Engineer.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications. The Program Administrator shall report directly to a responsible officer of the construction firm. The Program Administrator may supervise the Quality Control Program on more than one project provided that person can be at the job site within 2 hours after being notified of a problem.

- b. **Quality Control Technicians.** A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II or higher construction materials technician or highway construction technician and shall have a minimum of 2 years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator 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 Section 100-06.
- (2) Performance of all quality control tests as required by the technical specifications and Section 100-07.

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

- c. **Staffing Levels.** The Contractor shall provide sufficient qualified quality control 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 Quality Control Program shall state where different technicians will be required for different work elements.

**100-04 PROJECT PROGRESS SCHEDULE.** The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), PERT, or other format, or as otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

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.

**100-05 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:

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

**100-06 INSPECTION REQUIREMENTS.** Quality control 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 Section 100-07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

- a. During plant operation for material production, quality control 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 Quality Control Program shall detail how these and other quality control functions will be accomplished and used.
- b. During field operations, quality control 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 Program shall document how these and other quality control functions will be accomplished and used.

**100-07 QUALITY CONTROL TESTING PLAN.** As a part of the overall Quality Control Program, the Contractor shall implement a quality control 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 quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- a. Specification item number (for example, P-401)
- b. Item description (for example, Plant Mix Bituminous Pavements)
- c. Test type (for example, gradation, grade, asphalt content)
- d. Test standard (for example, ASTM or AASHTO test number, as applicable)

- e. Test frequency (for example, as required by technical specifications or minimum frequency when requirements are not stated)
- f. Responsibility (for example, plant technician)
- g. Control requirements (for example, target, permissible deviations)

The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D 3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by Section 100-08.

**100-08 DOCUMENTATION.** The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required 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 Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

- a. **Daily Inspection Reports.** Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations on a form acceptable to the Engineer. These technician's daily reports shall provide factual evidence that continuous quality control 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) Review of quality control tests; and
  - (7) Safety inspection.

The daily inspection reports shall identify inspections 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 quality control technician and the Program Administrator. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record.

- b. **Daily Test Reports.** The Contractor shall be responsible for establishing a system that will record all quality control 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 Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator.

- c. **Project Summary Test Reports.** *The Contractor shall be responsible for establishing a system that will record all quality control test results and summarize the test results as follows:*

- (1) Technical specification item number and description*
- (2) General description of work (i.e. pipe backfill, pavement subgrade)*
- (3) Number of tests taken*
- (4) Number of tests required to obtain 100% passing rate*

**100-09 CORRECTIVE ACTION REQUIREMENTS.** The Quality Control Program 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 Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of 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 quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

**100-10 SURVEILLANCE BY THE ENGINEER.** All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

**100-11 NONCOMPLIANCE.**

- a. The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his/her authorized representative to the Contractor or his/her authorized representative at the site of the work, shall be considered sufficient notice.
- b. In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:
  - (1) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.
  - (2) Order the Contractor to stop operations until appropriate corrective actions are taken.

**END OF SECTION 100**

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# **SECTION 4**

# **PERFORMANCE SPECIFICATION**

## **ITEM PERFORMANCE SPECIFICATION AST-101** **ABOVE GROUND STORAGE TANKS**

### **101.1 SCOPE OF SERVICE**

1. The work to be performed under this performance specification section shall consist of a **DESIGN-BUILD** project for the fabricating, delivering, installing, connecting, and testing two (2) each 12,000 gallon above-ground double-wall steel tanks with self-contained, integral fuel transfer equipment, as described herein and on the drawings. The tanks will provide for a self-serve pump, hose and reel system that can be plugged into the same Point-of-Sale device. This item shall also include one (1) self-service, Point-of-Sale payment terminal to serve both the Jet-A and Avgas tanks. The ladder and platform assembly is considered to be an integral part of the assembly. The tank assemblies will be installed on a concrete slab to be constructed for this fuel farm. Additional work includes installing underground electrical and telephone lines to the fuel tank site, and all required electrical work.
2. The work shall include all painted coatings, signs, and labels. It shall include all equipment, installation, accessories, start-up, testing, training, and incidentals required for a complete and functional installation, other the external electrical work, and fire extinguishers and fuel for start-up and testing which will be furnished by the Owner. This is a turn-key project and the fuel farm shall be fully functional and operational at the completion of the project.

### **101.2 SITE**

1. The new fuel farm site is located approximately 125 feet east of the existing Terminal/FBO Building and approximately 20 feet south of the security gate.
2. By submitting a bid, the successful Contractor represents they have visited the site and have become fully familiar with all site conditions which are visible at the surface, and that no condition which was visible at the time of the bid may be claimed as a "differing condition" for purposes of justifying additional scope, change orders, or time extensions, on the grounds that the claimed condition was not described on the drawings.

### **101.3 CONSTRUCTION SAFETY REQUIREMENTS**

1. Construction shall conform to the requirements of FAA Advisory Circular-AC No: 150/5370-2, *Operational Safety on Airports during Construction*, latest edition.

2. Contractor shall furnish construction signage, lighting, and traffic control personnel to provide secured access to and from the staging area and project site. Requirements are shown on the Construction Phasing and Safety Plans of the construction drawings.
3. The project will be constructed within an active airfield. It is critically important the Contractor ensures the Contractor's, Subcontractor's, and Supplier's vehicles and personnel remain strictly within the designated work area. Contractor shall assure his personnel and subcontractor's personnel always watch for approaching aircraft before entering into any active area.
4. In addition to airfield safety requirements, normal OSHA construction-site safety requirements shall be complied with for the safety of workers and others. For example, safeguarding open excavations and structures, providing protection for extension cords, etc.

#### **101.4 PROTECTION OF PROPERTY**

1. The Contractor shall safeguard and protect all existing property which is not to be demolished under this project, and all completed or partially-completed work. He shall repair, replace, or otherwise make good any damage to existing property caused by construction operations, at no additional cost to the Owner.
2. The Contractor shall comply with all City, County and State requirements for the use of public streets to access this project. No steel-treaded vehicles shall be used on asphalt pavements.
3. Any areas used for staging, storage, parking, or otherwise disturbed for construction shall be cleaned up and restored to like-original condition at the end of the project. Paved areas shall be swept clean and repaired if required; unpaved areas shall be fine-graded and grassed by seeding with Bahia, except locations where potential for erosion exists, which shall be restored by sodding with Bahia.

#### **101.5 TEMPORARY FIELD OFFICE; FACILITIES FOR WORKERS**

1. Due to the short duration of the construction phase of this project, a temporary field office is not required.
2. The Contractor shall furnish adequate sanitary toilet and drinking water facilities for workers. Existing toilet and drinking water facilities at airport-based facilities and businesses are not to be used by construction workers.

3. A weather-protected bulletin board shall be installed near the construction entrance for posting of notices required by law, permits, list of emergency telephone numbers, etc.
4. Construction workers' personal vehicles shall be parked in the designated employee parking area or staging/storage area.
5. All temporary facilities shall be removed at the end of the project, and all disturbed areas shall be restored to "like-original" condition.

## **101.6 SEQUENCE OF OPERATIONS**

The basic sequence of work shall be as follows:

1. Prepare submittal for tanks and equipment; submit to Engineer for approval.
2. After approval has been received, begin acquisition of tank and equipment, and fabrication.
3. During fabrication of the tank and equipment, perform the "rough electric" installation so that a minimum amount of electrical work will remain to be performed after the tanks are set.
4. Set the tanks and equipment; make connections; perform testing including placing the "self-serve" terminal into operation.
5. Clean-up site.

## **101.7 ELECTRICAL WORK**

### **101-7.1 DESCRIPTION; STANDARDS**

1. This section includes all site-installed electrical work that is not an integral part of the fuel tank and equipment assemblies.
2. The electrical work under this section includes, but is not limited to, all underground electrical and telephone conduits, including conduits in trench and conduits installed; pull boxes and junction boxes, post-mounted equipment, post-mounted emergency-stop, connection to an existing electrical service, and all conductors and cables, including the telephone cable.

3. All work shall be performed in accordance with the National Electrical Code (NFPA-70E), latest edition. The electrical work shall be performed by licensed commercial electricians.

### **101-7.2 MATERIALS; SUBMITTALS**

1. Underground conduit shall be PVC Sch. 40 with solvent-weld joints, except the conduit risers emerging from the ground at proposed equipment posts shall be PVC Schedule 80. Sch. 40 conduits shall be in 20 foot lengths with integral bells, to minimize the number of joints. Above-ground conduits and fittings in the tank slab area shall be rigid galvanized steel conduit (ROSC) with explosion-proof (Class 1, Div. 1) fittings. Flexible conduit shall not be used unless it is rated explosion-proof. All above-slab conduits shall be primed with galvanized-steel primer and painted in the same manner as the fuel piping and equipment.
2. Conductors shall be stranded copper with 600 volt THWN-THHN insulation. Size and color coding of conductors shall be as required. Telephone cable shall be 4-pair (minimum), No. 19 gauge, copper shielded, PVC jacketed, suitable for direct burial (even though it will be installed in conduit.)
3. Other components shall be as specified by the manufacturer.
4. Submit manufacturer's information for conduits, conductors, equipment, boxes, fittings, and all other items except minor, generic hardware items. Submit 1 paper copy, preferably bound into 3-ring binders. Submit only enough information to clearly describe the items to be furnished; do not include unnecessary back-up information. Indicate all manufacturer selections and options; do not leave it to the reviewer to mark options. Do not order any items until the submittals have been returned.

### **101-7.3 CONSTRUCTION METHODS**

1. Preliminary: Contact the State of Florida One-Call Center and have underground utilities located before excavating. Carefully locate, avoid, and protect identified underground utilities. Immediately notify the Engineer/Airport of any apparent conflicts.
2. Trenching and Backfill: Mark the conduit route accurately, using the layout information on the electrical plan. Provide the Engineer and the Airport staff with at least 48 hours advance notice before beginning excavation. Trench in a straight line or smooth curve (as indicated) between termination points, and locate stub-ups

accurately. Conduits shall be buried 24" deep unless otherwise noted. Backfill shall not include large stones that could damage the conduit. Trench for parallel power and telephone conduits shall be wide enough to maintain the conduits 12" apart horizontally.

3. Conduit Installation in Trench: Join the PVC conduits using fresh, medium bodied PVC cement. Discard cement that has begun to gel. Cement the conduit joints using the same care that would be used for water pipe under pressure. Backfill the trench in 8" maximum lifts, with each lift firmly compacted before proceeding to the next lift. For all but the final lift, use a hand compactor with a head that will fit in the narrow trench. Compact the final lift using a vehicle tire running lengthwise in the trench; continue adding material until there is no more settlement. Rake out all rocks and smooth flush with existing grade. Re-grassing is not required, if the disturbance is limited to a narrow trench width.
4. Installation of Equipment: Install equipment, fittings, etc. in a neat and workmanlike manner. All conduits shall be rigid PVC; no flexible conduit shall be used. All exposed above-ground conduit at posts shall be Sch. 80. Securely attach conduits and enclosure to concrete post, using lead expansion anchors or large dia. (1/4") stainless steel concrete tapping screws.
5. Pulling Conductors and Cable: Pull the specified conductors and telephone cable through the conduits, using pulling lubricant and using care to avoid damage. Provide adequate, but not excessive, slack at terminations. Coordinate the termination of the telephone cable with the local telephone service provider.
6. Testing: Verify the continuity and measure insulation resistance to ground of all conductors. Test the emergency stop buttons, to verify that they shut off the power contactors.

## **101.8 JET-A AND AVGAS TANKS AND FUELING EQUIPMENT**

### **101-8.1 SCOPE OF WORK**

1. The work to be performed under this specification shall consist of fabricating, delivering, installing, connecting, and testing a "turn-key" aviation fuel system consisting of two (2) 12,000 gallon above-ground double-wall steel tanks with self-contained, integral fuel transfer equipment, as described herein and on the drawings provided by the manufacturer. This item shall also include a joint-use "self-service" point-of-sale terminal for Jet-A and Avgas. The ladder and platform assembly is considered to be an integral part of the assembly.

2. The work shall include all painted coatings, signs, and labels. It shall include all equipment, installation, accessories, start-up, testing, training, and incidentals required for a complete and functional installation, to include all electrical work, and fire extinguishers and fuel for start-up and testing which will be furnished by the Owner.

#### **101-8.2 QUALITY ASSURANCE – MATERIALS AND EQUIPMENT**

1. Materials and equipment are specified either in generic terms or by specific manufacturer. If a specific manufacturer is indicated, the Contractor shall supply the specified material or equipment, or an item from another manufacturer that is considered "equal or better" than the specified item in the sole judgment of the Engineer, based on detailed information submitted by the Contractor. To be considered "equal or better", the submitted equipment must conform to the criteria described in the Contract Documents, shall physically fit in the same location as the specified item, and shall meet all of the applicable regulatory codes and testing requirements.
2. Aviation Fuel equipment and assemblies shall be manufactured, fabricated, or assembled by firms specializing in the manufacture, fabrication, or assembly of aviation fueling systems, with a minimum of three (3) years of documented experience.
3. Capable service support for all equipment shall be readily available in the local (South - Central Florida) service area.
4. Detailed shop drawings, certifications, and other manufacturer's information shall be submitted to the Engineer for approval, for all equipment and other items (except minor generic hardware items.) THE SUBMITTAL SHALL INCLUDE A CERTIFICATION BY THE FUELING EQUIPMENT INSTALLER THAT THE SUBMITTED ITEMS CONFORM TO THE REQUIREMENTS OF THESE SPECIFICATIONS (with any technical differences specifically noted in the certification, with a request for approval.) Copies of warranties shall be included in the submittal. Mark all options and selections for each item; do not leave it to the Engineer to mark options and selections for the Contractor. Submit 2 copies, with 8.5 x 11 and 11"x17" pages neatly organized and bound into 3-ring binders. Items shall not be ordered prior to the return to the Contractor of the approved submittals.

**101-8.3 QUALIFICATIONS OF CONTRACTOR, FUELING EQUIPMENT INSTALLER, AND PERSONNEL**

1. The Contractor shall be a qualified Aviation Fueling Contractor and/or Aviation Fueling Equipment Fabricator, having not less than five (5) years continuous experience in aviation fueling fabrication and/or installations.
2. Installation of fueling equipment shall be performed only by personnel who have a minimum of two (2) years continuous experience installing this type equipment.

**101-8.4 GOVERNING STANDARDS**

1. Equipment and installation necessary to accomplish the work specified herein shall be consistent with the latest editions (unless noted otherwise) of applicable federal, state, and local codes, rules, and regulations regarding fuel storage, transfer, and dispensing systems, including but not limited to the following:
  - a. 40 CFR Part 112 Oil Pollution Prevention (SPCC rule)
  - b. National Fire Protection Association (NFPA).
    - i. NFPA 30, Flammable and Combustible Liquids Code.
    - ii. NFPA 70, Standard for Electrical Safety In the Workplace.
    - iii. NFPA 407, Standard for Aircraft Fuel Servicing.
  - c. Air Transport Association (ATA) Specification No. 103 - Standards for Jet Fuel Quality Control at Airports.
  - d. All work specified herein shall conform to or exceed the requirements of the above referenced codes, rules, and regulations; provided that whenever the provisions of said publications are in conflict with the requirements specified herein, the more stringent requirement shall apply.
2. Where governing standards listed above reference industry standards, the following standards shall be followed as applicable:
  - a. Petroleum Equipment Installation Institute (PEI).
    - i. Publication RP 200 (Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling).

- ii. Publication RP 300 (Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Fueling Sites).
- b. American Petroleum Institute (API).
- i. API Publication 1500, Storage and Handling of Aviation Fuels at Airports.
  - ii. API Bulletin 1529, Aviation Fueling Hose.
  - iii. API Bulletin 1542, Airport Equipment Marking for Fuel Identification.
  - iv. API 1581, Specifications and Qualification Procedures for Aviation Jet Fuel Filter/Separators.
  - v. API Standard No. 2000, Venting Atmospheric and Low-Pressure Storage Tanks.

#### **101-8.5 START-UP AND TRAINING**

1. The Contractor shall be responsible to provide start-up and training of all major systems and electrical equipment and assume all associated costs, including wages and expenses of manufacturer's representatives.
2. Contractor shall notify the Owner at least one week prior to scheduling equipment start-up tests and training events. The Contractor shall provide labor and material as necessary to aid Owner in inspection and verification of equipment start-up. Although it would be preferable to conduct the start-up and training for the fuel equipment concurrently with the self-serve terminal (point-of-sale), it would be acceptable to conduct the self-serve terminal start-up and training at a later time, if necessary for logistical reasons.
3. Where required by the technical specifications, the manufacturer's authorized representative shall be present at the time of equipment start-up and shall be responsible for conducting all tests and certifying the results.
4. After verification by the Owner that the installation is acceptable, the Contractor will provide the services of qualified personnel to instruct the Owner's representative or fueling system operator in the operation of each partial or complete system or piece of equipment (e.g., pumping systems, filter systems, tank monitoring system, etc.). Advance notice of at least one week shall be given to the Owner prior to the scheduling of this instruction period. The Owner reserves the right to postpone acceptance of any equipment for which the Owner has not received instructions.

### **101-8.6 SPECIFIC REQUIREMENTS - JET-A AND AVGAS TANKS AND EQUIPMENT**

1. General: Provide two (2) 12,000 gallon pre-engineered, pre-fabricated, integrated, self-contained, complete fuel storage tank/transfer equipment systems as described herein.
  - a. The system shall offload the Transport truck, load the refueler truck, and allow recirculation at a rate of at least 200 gallons per minute (GPM).
  - b. As per NFPA 407, piping valves and fittings shall be of metal suitable for aviation fuel service, and designed for the working pressure and mechanically and thermally produced structural stresses to which they could be subjected.
  - c. System and components shall meet standards as required by major aviation fuel suppliers for the storage and dispensing of Jet-A and Avgas.
2. Tank Specifications: Provide 10-foot diameter, 12,000-gallon, aboveground, horizontal, double-wall, carbon steel storage tanks, with interstitial monitoring. The tank shall be fabricated consistent with Underwriters Laboratories' UL-142 specifications and shall be so labeled.
  - a. Tank shall meet NFPA 30 codes for aboveground storage tanks. Tank shall be factory pressure tested in accordance with the code under which it is fabricated.
  - b. Secondary Containment: A closely-spaced, double-wall tank arrangement with interstitial monitoring shall be provided, for secondary containment.
  - c. Finish: Tank interior, and all exterior surfaces (other than glass, stainless steel, nameplates, and similar items) shall be factory sandblasted and shall be protected from corrosion by a minimum of one primer coat, one bond coat, and 10 to 12 mils of two part epoxy, color white.
  - d. Tank Slope: Fabricate the tank support cradles (saddles) so that there is a longitudinal slope of at least 2 inches per 10 feet (1.67%) from the front of the tank toward the sump at the rear of the tank.
  - e. Install and mount fuel facilities in accordance with referenced standards NFPA 30, PEI RP200, as recommended by the tank manufacturer.
  - f. Provide all necessary openings and pipe penetrations. Coordinate with tank accessories described herein.
  - g. Labeling: The tank and piping systems shall receive proper labeling, cautionary wording, and color code, per NFPA 407, API 1542, and UL-142. Where

discrepancies in labeling may appear, notify the Owner's Representative for direction. In addition, the tank nameplate shall indicate the following:

- i. Standard of design by which tank was manufactured
- ii. Name of product to be stored in the tank (AVGAS 100 LL or JET-A).
- iii. Year in which tank was manufactured.
- iv. Unique identification number (coordinate with Owner).
- v. Dimensions, design, working capacity, and tank model number.
- vi. Name of tank manufacturer.
- vii. Date of installation (fill port only).

3. Tank Appurtenances:

- a. Manway: The storage tank shall be provided with a minimum 24-inch diameter watertight and lockable manway.
- b. Sump Drain: A hand operated frost proof sump system shall be provided to drain water from the bottom of the tank. Sumping operation shall be accessible from ground level. The sump discharge point shall be configured such that a five-gallon bucket can readily be placed beneath it for easy access of fuel samples. Provide an anti-siphon valve in the sump piping. Locate drain pick-up tube in the tank sump area, in the centerline of the tank.
- c. Overfill Prevention: Provide a fail-safe, non-hydraulic shocking, 100% full closing overfill limiting device that automatically stops delivery of liquid to the tank when the liquid level in the tank reaches 95% of capacity. In no case shall this device restrict or interfere with the proper functioning of the normal vent or the emergency vent.
- d. Normal Vent:
  - i. Provide a pressure-vacuum vent to prevent the development of pressure or vacuum exceeding the design pressure of the tank as a result of filling or emptying and atmospheric changes. Vent shall be compatible with the Stage I vapor recovery system.
  - ii. Size vent in accordance with API No. 2000.
  - iii. Vent pipe outlet shall not be less than 12 feet above the adjacent ground level or less than 2-feet above the top of the tank.

- e. Emergency Vent: The tank shall be equipped with an emergency relief vent to relieve excess internal pressure caused by exposure fires. Vents shall be sized in accordance with NFPA 30.
- f. Manual Gauge Access Port: Equip tank with a lockable, watertight, manual gauge access port. Provide a calibrated gauge stick.
- g. Structural Lifting Lugs: Provide lifting lugs designed to support the weight of the entire fuel facility and strategically placed for even weight distribution as recommended by the tank manufacturer.
- h. Vapor Recovery: The Avgas storage tank shall be provided with a Stage I vapor recovery system. Include vapor adapter and cap.
- i. Fill Tube and Diffuser: The storage tank shall be equipped with a fill/drop tube at the fuel fill inlet riser. Fill tube shall be the same diameter as the fuel fill inlet riser, and shall extend to within 6-inches of the bottom of the tank.
  - i. Support fill pipe to minimize vibration. Support shall not hinder longitudinal expansion and contraction.
  - ii. Fill tube shall be removable.
- j. Provide JA turn operating shut-off valves at all piping connections to the storage tank.
- k. Provide anti-siphon valves in all applicable tank piping.
- l. Piping, valves, dispensing equipment, hoses, filter monitor, air eliminator, connections, outlets, fittings, and other components shall be designed to meet the functional requirements described herein, and working pressure requirements of the system.
- m. Electrical Items Integral with Fueling Equipment: All electrical equipment, wiring, and grounding that is a part of the fueling equipment assembly shall conform to and be installed in accordance with the National Electrical Code (NFPA 70.) All fuel facility control boxes, wiring components, motors, starters, and electrical equipment located in the hazardous area shall be of explosion proof design. All electrical components shall be rated NEMA 4X.

4. Signs and Markings for the Avgas tank shall be provided as follows:
  - a. Location: All four sides of storage tank.
    - i. Size: Approx. 1'-4" x 8" (Min letter height 3 inches)
    - ii. Face Color : Red
    - iii. Text Color : White
    - iv. Text: AVGAS 100LL
  - b. Location: All four sides of storage tank.
    - i. Size: Approx. 1'-4" x 8" (Min letter height 3 inches)
    - ii. Face Color: White
    - iii. Text Color: Red
    - iv. Text: NO SMOKING
  - c. Location: All four sides of storage tank.
    - i. Size: Approx. 1'-4" x 8" (Min letter height 3 inches)
    - ii. Face Color: Red
    - iii. Text Color: White
    - iv. Text: FLAMMABLE
5. Signs and markings for the Jet-A tanks shall be similar, except as required for Jet-A.
6. A 20-B:C fire extinguisher shall be provided.
7. Approved Fabricator: The equipment shall be fabricated by any of the firms listed below, or approved equal. (The prime contractor and equipment fabricator can be the same; there is no objection to this).
  - a. ABA-CON Inc., Titusville, Florida, telephone 321-567-4967.
  - b. American Environmental Aviation, Inc., Sanford, Florida, telephone 407-585-4242.
  - c. Fuel Tech Inc., Mims, Florida, telephone 1-800-628-1863 or 321-268-2065.
8. Warranty: Tanks shall be warranted to be free from defects in manufacturing, workmanship, and materials for a period of one year after date of shipment. All other

components shall have a minimum one year parts and labor warranty, from the fabricator/installer.

#### **101-8.7 EXTERNAL STAIRS PLATFORM**

1. Furnish and install an OSHA compliant fixed stair and catwalk/platform with handrails assembly to the access the manway and tank gauge port of the tank. Provide removable grating and/or covers on the platform deck to access fittings located beneath the assembly. The stair and platform with handrails assembly shall be finished (painted) in the manner described for the storage tank and fuel transfer equipment, except color to be Federal Safety Yellow.

#### **101-8.8 EXTERNAL PIPING**

1. All piping is integral to the equipment.

#### **101-8.9 CONCRETE PAD(s)**

1. This work shall consist of Portland cement concrete, with and without reinforcement constructed on a prepared subgrade or subbase course in accordance with these specifications and shall conform to the lines, grades and thicknesses as specified herein, or as determined by the contractor.
2. The PCC section shall meet FDOT Section 350 concrete and FDOT Section 304.

#### **101-8.10 PERMITTING, EQUIPMENT DELIVERY, AND INSTALLATION**

1. Contractor shall be responsible for obtaining all applicable local (City of Avon Park) permits. Permit fees will be paid by the Contractor. Contractor shall provide assistance to the Owner in registering the tanks with the FDEP.
2. Contractor shall be responsible for all coordination and logistics required to deliver the tank and equipment assemblies to the site via public roads, and set the assemblies in place.
3. **IMPORTANT - FAA CRANE COORDINATION:** The use of a crane to set the tanks (or for any other purpose) requires close coordination with the Avon Park Executive Airport staff, who will coordinate with the FAA. The Contractor shall Provide the Airport Manager with at least 48 hours advance notice of the arrival of the crane. The height of the crane, and the times and date(s) of use, shall be specified. The crane boom shall be erected only after approval is given by the Airport Manager. The boom may be raised during daylight hours only, and must be lowered at night and during times of poor visibility. A standard 3' square orange and white checkerboard pattern flag shall be flown at the top of the crane boom.

4. Off-load and install the tanks and equipment in accordance with manufacturer's written instructions and approved submittals. Set the tanks, and particularly the cradles (saddles), at the exact location shown on the installation drawing.
5. Safeguard all manuals, parts lists, and other manufacturer's information that is packed with the equipment, for later inclusion in the Owner's manuals (see 101-8.10 below.)
6. Repair damage to coatings with suitable repair materials to a condition equal or better than original.

#### **101-8.11 FIELD QUALITY CONTROL; COMPLETION AND CLOSE-OUT**

1. Contractor shall arrange for a qualified service representative to supervise the installation, start-up, functional test, and training. The period of onsite service shall not be less than eight (8) hours.
2. Details pertaining to operation and maintenance of the various components shall be thoroughly explained to airport fueling operations personnel. Any special tools required for adjusting and maintaining the equipment, or training materials, shall be provided by the service representative to airport operations personnel.
3. Manufacturer's or fabricator's representative shall conduct a complete electrical, mechanical, and functional testing of all equipment provided under this Contract. The technician shall be capable of making mechanical and electrical system adjustments to assure functioning of all control devices, indicators, shut-downs, and alarms. Provide written certification from the manufacturer's representative indicating that the fuel system is properly installed, has been successfully started up, and is ready for service.
4. Any leaks, malfunctions, and punch list items shall be corrected to the satisfaction of the Owner.
5. Contractor shall furnish to the Owner two copies of the Owner's Manual, each including, as a minimum, operating instructions, copies of approved submittals, manufacturer's instructions and parts lists that were shipped with equipment, and warranties (at least one copy of each warranty shall be the original.) These documents shall be neatly organized, tabbed, and bound in 3-ring binders.
6. Contractor shall coordinate with all permitting agencies to assure that all final inspections have been performed and all permit requirements have satisfied.
7. The effective date of the warranties shall be the date on which the items have been completed, and the operation of the facility has been turned over to the Owner.

#### **101-8.12 SUBSTANTIAL COMPLETION**

1. Substantial Completion is defined as the point at which the equipment is fully installed, operational, has successfully passed field acceptance testing of all elements, and inspections are completed.
2. When the Contractor considers the work as substantially complete, the Contractor shall submit to the City: (1.) A written notice that the work, or designated portion thereof, is substantially complete; (2.) A list of items to be completed or corrected.
3. Within a reasonable time after receipt of such notice, the City will make an inspection to determine the status of completion.
4. Should the City determine that the work is not substantially complete: (1.) The City will promptly notify the Contractor in writing, giving the reasons therefore; (2.) The Contractor shall remedy the deficiencies in the work and send a second written notice of substantial completion to the City; (3.) The City will re- inspect the work.
5. When the City finds that the work is substantially complete, the City shall prepare a Certificate of Substantial Completion with a list of items to be completed or corrected before final payment.

#### **101-8.13 FINAL INSPECTION**

1. When the Contractor considers the work complete, the Contractor shall submit written certification that: (1.) Contract Documents have been reviewed; (2.) Work has been inspected for compliance with Contract Documents; (3.) Work has been completed in accordance with Contract Documents; (4.) Equipment and systems have been tested in the presence of the City representative and are operational.
2. The City will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
3. Should the City consider that the work is incomplete or defective: (1.) The City will promptly notify the Contractor in writing listing the incomplete or defective work; (2.) The Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to the City that the work is complete; (3.) The City will re-inspect the work.
4. When the City finds that the work is acceptable under the Contract Documents, the City shall request the Contractor make closeout submittals.

#### **101-8.14 CONTRACTOR'S CLOSEOUT SUBMITTALS TO OWNER**

1. Evidence of compliance with requirements of governing authorities.
2. Consent of surety to final payment.

3. Project record documents.
4. Completion of all submittals as required by Contract Documents.
5. Maintenance bond and warranties.
6. Certificate of Insurance for products and completed operations.

### **101.9 BASIS OF PAYMENT**

1. Payment for furnishing and installing all fueling equipment under this section shall be paid for under the lump-sum pay item.
2. Payment of the lump-sum bid price shall be full compensation for furnishing all design, material, labor, equipment, incidentals, supplies, start-up, testing, adjustment, factory representation, etc., required to complete the work under this section as a complete and functional unit.

**END OF SECTION AST-101**

# **APPENDIX A**

# **DRAWINGS**

# AVON PARK EXECUTIVE AIRPORT

## AVON PARK, FLORIDA (AVO)

### PLANS FOR TURN-KEY FUEL FARM (DESIGN-BUILD)

ISSUED FOR BID

**AVON PARK CITY COUNCIL MEMBERS**

SHARON SCHULER	MAYOR
BRENDA GILES	DEPUTY MAYOR
TERRY HESTON	COUNCILMAN
PARKE SUTHERLAND	COUNCILMAN
GARRETT ANDERSON	COUNCILMAN

**AVON PARK CITY MANAGEMENT**

JULIAN DELEON	CITY MANAGER
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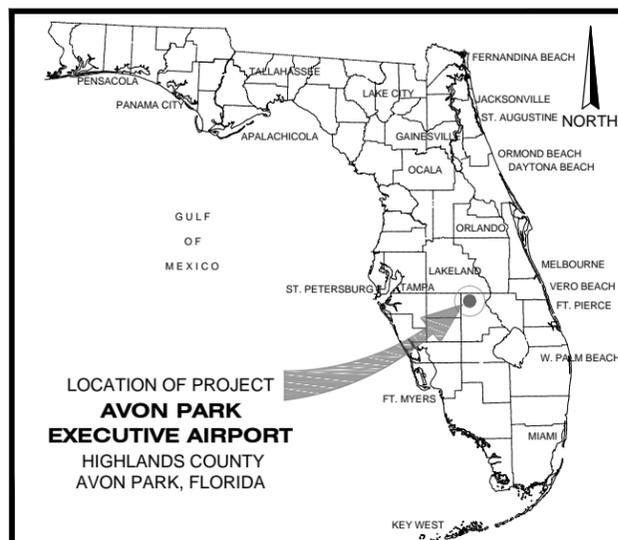


CITY OF AVON PARK  
HIGHLANDS COUNTY, FLORIDA

FDOT FM NO. 436411-1-94-01

CITY OF AVON PARK BID NO. 05-15

AHC PROJECT NO. 14060.02

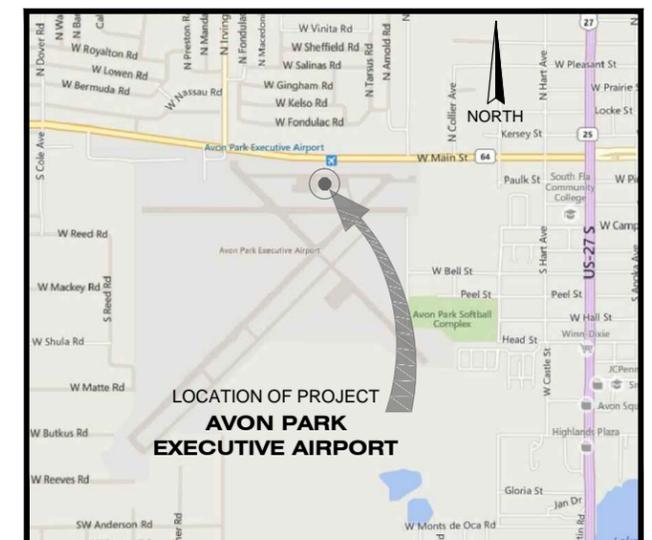


VICINITY MAP



1000 LEGION PLACE, SUITE 1285  
ORLANDO, FL 32801  
CERTIFICATE OF AUTHORIZATION #29728

MARCH 2015



LOCATION MAP





## **APPENDIX B**

### **FAA ADVISORY CIRCULAR 150/5370-2F**

### **OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION**



U.S. Department  
of Transportation

Federal Aviation  
Administration

# Advisory Circular

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**Subject:** Operational Safety on  
Airports During Construction

**Date:** 9/29/11  
**Initiated by:** AAS-100

**AC No:** 150/5370-2F

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- 1. Purpose.** This AC sets forth guidelines for operational safety on airports during construction.
- 2. What this AC Cancels.** This AC cancels AC 150/5370-2E, Operational Safety on Airports During Construction, dated January 17, 2003.
- 3. Whom This AC Affects.** This AC assists airport operators in complying with Title 14 Code of Federal Regulations (CFR) Part 139, Certification of Airports (Part 139). For those certificated airports, this AC provides one way, but not the only way, of meeting those requirements. The use of this AC is mandatory for those airport construction projects receiving funds under the Airport Improvement Program (AIP) or the Passenger Facility Charge (PFC) Program. See Grant Assurance No. 34, "Policies, Standards, and Specifications," and PFC Assurance No. 9, "Standard and Specifications." While we do not require non-certificated airports without grant agreements to adhere to these guidelines, we recommend that they do so to help these airports maintain operational safety during construction.
- 4. Principal Changes.**
  - a.** Construction activities are prohibited in safety areas while the associated runway or taxiway is open to aircraft.
  - b.** Guidance is provided in incorporating Safety Risk Management.
  - c.** Recommended checklists are provided for writing Construction Safety and Phasing Plans and for daily inspections.
- 5. Reading Material Related to this AC.** Numerous ACs are referenced in the text of this AC. These references do not include a revision letter, as they are to be read as referring to the latest version. Appendix 1 contains a list of reading material on airport construction, design, and potential safety hazards during construction, as well as instructions for obtaining these documents.

**Michael J. O'Donnell**  
Director of Airport Safety and Standards

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## Chapter 1. Planning an Airfield Construction Project

**101. Overview.** Airports are complex environments, and procedures and conditions associated with construction activities often affect aircraft operations and can jeopardize operational safety. Safety considerations are paramount and may make operational impacts unavoidable. However, careful planning, scheduling, and coordination of construction activities can minimize disruption of normal aircraft operations and avoid situations that compromise the airport's operational safety. The airport operator must understand how construction activities and aircraft operations affect one another to be able to develop an effective plan to complete the project. While the guidance in this AC is primarily used for construction operations, some of the concepts, methods and procedures described may also enhance the day-to-day airport maintenance operations, such as lighting maintenance and snow removal operations.

**102. Plan for Safety.** Safety, maintaining aircraft operations, and construction costs are all interrelated. Since safety must not be compromised, the airport operator must strike a balance between maintaining aircraft operations and construction costs. This balance will vary widely depending on the operational needs and resources of the airport and will require early coordination with airport users and the FAA. As the project design progresses, the necessary construction locations, activities, and associated costs will be identified. As they are identified, their impact to airport operations must be assessed. Adjustments are made to the proposed construction activities, often by phasing the project, and/or to airport operations in order to maintain operational safety. This planning effort will ultimately result in a project Construction Safety and Phasing Plan (CSPP). The development of the CSPP takes place through the following five steps:

**a. Identify Affected Areas.** The airport operator must determine the geographic areas on the airport affected by the construction project. Some, such as a runway extension, will be defined by the project. Others may be variable, such as the location of haul routes and material stockpiles.

**b. Describe Current Operations.** Identify the normal airport operations in each affected area for each phase of the project. This becomes the baseline from which the impact on operations by construction activities can be measured. This should include a narrative of the typical users and aircraft operating within the affected areas. It should also include information related to airport operations: the Aircraft Reference Code (ACRC) for each runway; Airplane Design Group (ADG) and Taxiway Design Group (TDG)<sup>1</sup> for each affected taxiway; designated approach visibility minimums; available approach and departure procedures; most demanding aircraft; declared distances; available air traffic control services; airport Surface Movement Guidance and Control System plan; and others. The applicable seasons, days and times for certain operations should also be identified as applicable.

**c. Allow for Temporary Changes to Operations.** To the extent practical, current airport operations should be maintained during the construction. In consultation with airport users, Aircraft Rescue and Fire Fighting (ARFF) personnel, and FAA Air Traffic Organization (ATO) personnel, the airport operator should identify and prioritize the airport's most important operations. The construction activities should be planned, through project phasing if necessary, to safely accommodate these operations. When the construction activities cannot be adjusted to safely maintain current operations, regardless of their importance, then the operations must be revised accordingly. Allowable changes include temporary revisions to approach procedures, restricting certain aircraft to specific runways and taxiways, suspension of certain operations, decreased weights for some aircraft due to shortened runways,

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<sup>1</sup> Taxiway Design Group will be introduced in AC 150/5300-13A.

and other changes. An example of a table showing temporary operations versus current operations is shown in Table 3-1 Sample Operations Effects.

**d. Take Required Measures to Revised Operations.** Once the level and type of aircraft operations to be maintained are identified, the airport operator must determine the measures required to safely conduct the planned operations during the construction. These measures will result in associated costs, which can be broadly interpreted to include not only direct construction costs, but also loss of revenue from impacted operations. Analysis of costs may indicate a need to reevaluate allowable changes to operations. As aircraft operations and allowable changes will vary so widely among airports, this AC presents general guidance on those subjects.

**e. Manage Safety Risk.** Certain airport projects may require the airport operator to provide a Project Proposal Summary to help the FAA to determine the appropriate level of Safety Risk Management (SRM) documentation. The airport operator must coordinate with the appropriate FAA Airports Regional or District Office early in the development of the CSPP to determine the need for SRM documentation. See FAA Order 5200.11, FAA Airports (ARP) Safety Management System (SMS), for more information. If the FAA requires SRM documentation, the airport operator must at a minimum:

- (1) **Notify the appropriate FAA Airports Regional or District Office** during the project “scope development” phase of any project requiring a CSPP.
- (2) **Provide documents** identified by the FAA as necessary to conduct SRM.
- (3) **Participate in the SRM process** for airport projects.
- (4) **Provide a representative** to participate on the SRM panel.
- (5) **Ensure that all applicable SRM identified risks elements are recorded** and mitigated within the CSPP.

**103. Develop a Construction Safety and Phasing Plan (CSPP).** Development of an effective CSPP will require familiarity with many other documents referenced throughout this AC. See Appendix 1, Related Reading Material for a list of related reading material.

**a. List Requirements.** A CSPP must be developed for each on-airfield construction project funded by the Airport Improvement Program (AIP) or the Passenger Facility Charge (PFC) program or located on an airport certificated under Part 139. As per Order 5200.11, such projects do not include construction, rehabilitation, or change of any facility that is entirely outside the air operations area, does not involve any expansion of the facility envelope and does not involve construction equipment, haul routes or placement of material in locations that require access to the air operations area, increase the facility envelope, or impact line-of-sight. Such facilities may include passenger terminals and parking or other structures. However, extraordinary circumstances may trigger the need for a Safety Assessment and a CSPP. The CSPP is subject to subsequent review and approval under the FAA’s Safety Risk Management procedures (see paragraph 102.e above). Additional information may be found in Order 5200.11.

**b. Prepare a Safety Plan Compliance Document.** The Safety Plan Compliance Document (SPCD) details how the contractor will comply with the CSPP. Also, it will not be possible to determine all safety plan details (for example specific hazard equipment and lighting, contractor’s points of contact, construction equipment heights) during the development of the CSPP. The successful contractor must define such details by preparing an SPCD that the airport operator reviews for approval prior to issuance of a notice-to-proceed. The SPCD is a subset of the CSPP, similar to how a shop drawing review is a subset to the technical specifications.

**c. Assume Responsibility for the CSPP.** The airport operator is responsible for establishing and enforcing the CSPP. The airport operator may use the services of an engineering consultant to help develop the CSPP. However, writing the CSPP cannot be delegated to the construction contractor. Only those details the airport operator determines cannot be addressed before contract award are developed by the contractor and submitted for approval as the SPCD. The SPCD does not restate nor propose differences to provisions already addressed in the CSPP.

#### **104. Who Is Responsible for Safety During Construction?**

**a. Establish a Safety Culture.** Everyone has a role in operational safety on airports during construction: the airport operator, the airport's consultants, the construction contractor and subcontractors, airport users, airport tenants, ARFF personnel, Air Traffic personnel, including Technical Operations personnel, FAA Airports Division personnel, and others. Close communication and coordination between all affected parties is the key to maintaining safe operations. Such communication and coordination should start at the project scoping meeting and continue through the completion of the project. The airport operator and contractor should conduct onsite safety inspections throughout the project and immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

**b. Assess Airport Operator's Responsibilities.** An airport operator has overall responsibility for all activities on an airport, including construction. This includes the predesign, design, preconstruction, construction, and inspection phases. Additional information on the responsibilities listed below can be found throughout this AC. The airport operator must:

**(1) Develop a CSPP** that complies with the safety guidelines of Chapter 2, Construction Safety and Phasing Plans, and Chapter 3, Guidelines for Writing a CSPP. The airport operator may develop the CSPP internally or have a consultant develop the CSPP for approval by the airport operator. For tenant sponsored projects, approve a CSPP developed by the tenant or its consultant.

**(2) Require, review and approve the SPCD** by the contractor that indicates how it will comply with the CSPP and provides details that cannot be determined before contract award.

**(3) Convene a preconstruction meeting** with the construction contractor, consultant, airport employees and, if appropriate, tenant sponsor and other tenants to review and discuss project safety before beginning construction activity. The appropriate FAA representatives should be invited to attend the meeting. See AC 150/5300-9, *Predesign, Prebid, and Preconstruction Conferences for Airport Grant Projects*. (Note "FAA" refers to the Airports Regional or District Office, the Air Traffic Organization, Flight Standards Service, and other offices that support airport operations, flight regulations, and construction/environmental policies.)

**(4) Ensure contact information** is accurate for each representative/point of contact identified in the CSPP and SPCD.

**(5) Hold weekly or, if necessary, daily safety meetings** with all affected parties to coordinate activities.

**(6) Notify users, ARFF personnel, and FAA ATO personnel of construction** and conditions that may adversely affect the operational safety of the airport via Notices to Airmen (NOTAM) and other methods, as appropriate. Convene a meeting for review and discussion if necessary.

**(7) Ensure construction personnel know of any applicable airport procedures** and of changes to those procedures that may affect their work.

**(8) Ensure construction contractors and subcontractors undergo training** required by the CSPP and SPCD.

(9) **Ensure vehicle and pedestrian operations** addressed in the CSPP and SPCD are coordinated with airport tenants, the airport traffic control tower (ATCT), and construction contractors.

(10) **At certificated airports**, ensure each CSPP and SPCD is consistent with Part 139.

(11) **Conduct inspections** sufficiently frequently to ensure construction contractors and tenants comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.

(12) **Resolve safety deficiencies immediately.** At airports subject to 49 CFR Part 1542, Airport Security, ensure construction access complies with the security requirements of that regulation.

(13) **Notify appropriate parties** when conditions exist that invoke provisions of the CSPP and SPCD (for example, implementation of low-visibility operations).

(14) **Ensure prompt submittal of a Notice of Proposed Construction or Alteration** (Form 7460-1) for conducting an aeronautical study of potential obstructions such as tall equipment (cranes, concrete pumps, other.), stock piles, and haul routes. A separate form may be filed for each potential obstruction, or one form may be filed describing the entire construction area and maximum equipment height. In the latter case, a separate form must be filed for any object beyond or higher than the originally evaluated area/height. The FAA encourages online submittal of forms for expediency. The appropriate FAA Airports Regional or District Office can provide assistance in determining which objects require an aeronautical study.

(15) **Promptly notify the FAA Airports Regional or District Office** of any proposed changes to the CSPP prior to implementation of the change. Changes to the CSPP require review and approval by the airport operator and the FAA. Coordinate with appropriate local and other federal government agencies, such as EPA, OSHA, TSA, and the state environmental agency.

**c. Define Construction Contractor's Responsibilities.** The contractor is responsible for complying with the CSPP and SPCD. The contractor must:

(1) **Submit a Safety Plan Compliance Document (SPCD)** to the airport operator describing how it will comply with the requirements of the CSPP and supplying any details that could not be determined before contract award. The SPCD must include a certification statement by the contractor that indicates it understands the operational safety requirements of the CSPP and it asserts it will not deviate from the approved CSPP and SPCD unless written approval is granted by the airport operator. Any construction practice proposed by the contractor that does not conform to the CSPP and SPCD may impact the airport's operational safety and will require a revision to the CSPP and SPCD and re-coordination with the airport operator and the FAA in advance.

(2) **Have available at all times copies** of the CSPP and SPCD for reference by the airport operator and its representatives, and by subcontractors and contractor employees.

(3) **Ensure that construction personnel** are familiar with safety procedures and regulations on the airport. Provide a point of contact who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport. Many projects will require 24-hour coverage.

(4) **Identify in the SPCD the contractor's on-site employees** responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site whenever active construction is taking place.

(5) **Conduct inspections** sufficiently frequently to ensure construction personnel comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.

**(6) Restrict movement of construction vehicles and personnel** to permitted construction areas by flagging, barricading, erecting temporary fencing, or providing escorts, as appropriate and as specified in the CSPP and SPCD.

**(7) Ensure that no contractor employees**, employees of subcontractors or suppliers, or other persons enter any part of the air operations area (AOA) from the construction site unless authorized.

**(8) Ensure prompt submittal through the airport operator of Form 7460-1** for the purpose of conducting an aeronautical study of contractor equipment such as tall equipment (cranes, concrete pumps, other equipment), stock piles, and haul routes when different from cases previously filed by the airport operator. The FAA encourages online submittal of forms for expediency.

**d. Define Tenant's Responsibilities** if planning construction activities on leased property. Airport tenants, such as airline operators, fixed base operators, and FAA ATO/Technical Operations sponsoring construction must:

**(1) Develop, or have a consultant develop, a project specific CSPP** and submit it to the airport operator for certification and subsequent approval by the FAA. The approved CSPP must be made part of any contract awarded by the tenant for construction work.

**(2) In coordination with its contractor, develop an SPCD** and submit it to the airport operator for approval to be issued prior to issuance of a Notice to Proceed.

**(3) Ensure that construction personnel are familiar with safety procedures** and regulations on the airport.

**(4) Provide a point of contact** of who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport.

**(5) Identify in the SPCD the contractor's on-site employees** responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site whenever active construction is taking place.

**(6) Ensure that no tenant or contractor employees**, employees of subcontractors or suppliers, or any other persons enter any part of the AOA from the construction site unless authorized.

**(7) Restrict movement of construction vehicles** to construction areas by flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate, and as specified in the CSPP and SPCD.

**(8) Ensure prompt submittal through the airport operator of Form 7460-1** for the purpose of conducting an aeronautical study of contractor equipment such as tall equipment (cranes, concrete pumps, other.), stock piles, and haul routes. The FAA encourages online submittal of forms for expediency.

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## Chapter 2. Construction Safety and Phasing Plans

### Section 1. Basic Considerations

**201. Overview.** Aviation safety is the primary consideration at airports, especially during construction. The airport operator's Construction Safety and Phasing Plan (CSPP) and the contractor's Safety Plan Compliance Document (SPCD) are the primary tools to ensure safety compliance when coordinating construction activities with airport operations. These documents identify all aspects of the construction project that pose a potential safety hazard to airport operations and outline respective mitigation procedures for each hazard. They must provide all information necessary for the Airport Operations department to conduct airfield inspections and expeditiously identify and correct unsafe conditions during construction. All aviation safety provisions included within the project drawings, contract specifications, and other related documents must also be reflected in the CSPP and SPCD.

**202. Assume Responsibility.** Operational safety on the airport remains the airport operator's responsibility at all times. The airport operator must develop, certify, and submit for FAA approval each CSPP. It is the airport operator's responsibility to apply the requirements of the FAA approved CSPP. The airport operator must revise the CSPP when conditions warrant changes and must submit the revised CSPP to the FAA for approval. The airport operator must also require and approve a SPCD from the project contractor.

**203. Submit the CSPP.** Construction Safety and Phasing Plans should be developed concurrently with the project design. Milestone versions of the CSPP should be submitted for review and approval as follows. While these milestones are not mandatory, early submission will help to avoid delays. Submittals are preferred in 8.5 x 11 in or 11 x 17 in format for compatibility with the FAA's Obstruction Evaluation / Airport Airspace Analysis (OE / AAA) process.

**a. Submit an Outline/Draft.** By the time approximately 25% to 30% of the project design is completed, the principal elements of the CSPP should be established. Airport operators are encouraged to submit an outline or draft, detailing all CSPP provisions developed to date, to the FAA for review at this stage of the project design.

**b. Submit a Construction Safety and Phasing Plan (CSPP).** The CSPP should be formally submitted for FAA approval when the project design is 80% to 90% complete. Since provisions in the CSPP will influence contract costs, it is important to obtain FAA approval in time to include all such provisions in the procurement contract.

**c. Submit a Safety Plan Compliance Document (SPCD).** The contractor should submit the SPCD to the airport operator for approval to be issued prior to the Notice to Proceed.

**d. Submit CSPP Revisions.** All revisions to the CSPP or SPCD should be submitted to the FAA for approval as soon as required changes are identified.

**204. Meet CSPP Requirements.**

**a. To the extent possible,** the CSPP should address the following as outlined in Section 2, Plan Requirements and Chapter 3, Guidelines for Writing a CSPP, as appropriate. Details that cannot be determined at this stage are to be included in the SPCD.

**(1) Coordination.**

- (a) Contractor progress meetings.
- (b) Scope or schedule changes.
- (c) FAA ATO coordination.
- (2) Phasing.**
  - (a) Phase elements.
  - (b) Construction safety drawings
- (3) Areas and operations affected by the construction activity.**
  - (a) Identification of affected areas.
  - (b) Mitigation of effects.
- (4) Protection of navigation aids (NAVAIDs).**
- (5) Contractor access.**
  - (a) Location of stockpiled construction materials.
  - (b) Vehicle and pedestrian operations.
- (6) Wildlife management.**
  - (a) Trash.
  - (b) Standing water.
  - (c) Tall grass and seeds.
  - (d) Poorly maintained fencing and gates.
  - (e) Disruption of existing wildlife habitat.
- (7) Foreign Object Debris (FOD) management.**
- (8) Hazardous materials (HAZMAT) management**
- (9) Notification of construction activities.**
  - (a) Maintenance of a list of responsible representatives/ points of contact.
  - (b) Notices to Airmen (NOTAM).
  - (c) Emergency notification procedures.
  - (d) Coordination with ARFF Personnel.
  - (e) Notification to the FAA.
- (10) Inspection requirements.**
  - (a) Daily (or more frequent) inspections.
  - (b) Final inspections.
- (11) Underground utilities.**
- (12) Penalties.**
- (13) Special conditions.**
- (14) Runway and taxiway visual aids.** Marking, lighting, signs, and visual NAVAIDs.

- (a) General.
- (b) Markings.
- (c) Lighting and visual NAVAIDs.
- (d) Signs.

**(15) Marking and signs for access routes.**

**(16) Hazard marking and lighting.**

- (a) Purpose.
- (b) Equipment.

**(17) Protection.** Of runway and taxiway safety areas, object free areas, obstacle free zones, and approach/departure surfaces

- (a) Runway Safety Area (RSA).
- (b) Runway Object Free Area (ROFA).
- (c) Taxiway Safety Area (TSA).
- (d) Taxiway Object Free Area (TOFA).
- (e) Obstacle Free Zone (OFZ).
- (f) Runway approach/departure surfaces.

**(18) Other limitations on construction.**

- (a) Prohibitions.
- (b) Restrictions.

**b. The Safety Plan Compliance Document (SPCD)** should include a general statement by the construction contractor that he/she has read and will abide by the CSPP. In addition, the SPCD must include all supplemental information that could not be included in the CSPP prior to the contract award. The contractor statement should include the name of the contractor, the title of the project CSPP, the approval date of the CSPP, and a reference to any supplemental information (that is, “I, Name of Contractor, have read the Title of Project CSPP, approved on Date, and will abide by it as written and with the following additions as noted:”). The supplemental information in the SPCD should be written to match the format of the CSPP indicating each subject by corresponding CSPP subject number and title. If no supplemental information is necessary for any specific subject, the statement, “No supplemental information,” should be written after the corresponding subject title. The SPCD should not duplicate information in the CSPP:

**(1) Coordination.** Discuss details of proposed safety meetings with the airport operator and with contractor employees and subcontractors.

**(2) Phasing.** Discuss proposed construction schedule elements, including:

- (a) Duration of each phase.
- (b) Daily start and finish of construction, including “night only” construction.
- (c) Duration of construction activities during:
  - (i) Normal runway operations.
  - (ii) Closed runway operations.

(iii) Modified runway “Aircraft Reference Code” usage.

(3) **Areas and operations affected by the construction activity.** These areas and operations should be identified in the CSPP and should not require an entry in the SPCD.

(4) **Protection of NAVAIDs.** Discuss specific methods proposed to protect operating NAVAIDs.

(5) **Contractor access.** Provide the following:

(a) Details on how the contractor will maintain the integrity of the airport security fence (gate guards, daily log of construction personnel, and other).

(b) Listing of individuals requiring driver training (for certificated airports and as requested).

(c) Radio communications.

(i) Types of radios and backup capabilities.

(ii) Who will be monitoring radios.

(iii) Whom to contact if the ATCT cannot reach the contractor’s designated person by radio.

(d) Details on how the contractor will escort material delivery vehicles.

(6) **Wildlife management.** Discuss the following:

(a) Methods and procedures to prevent wildlife attraction.

(b) Wildlife reporting procedures.

(7) **Foreign Object Debris (FOD) management.** Discuss equipment and methods for control of FOD, including construction debris and dust.

(8) **Hazardous material (HAZMAT) management.** Discuss equipment and methods for responding to hazardous spills.

(9) **Notification of construction activities.** Provide the following:

(a) Contractor points of contact.

(b) Contractor emergency contact.

(c) Listing of tall or other requested equipment proposed for use on the airport and the timeframe for submitting 7460-1 forms not previously submitted by the airport operator.

(d) Batch plant details, including 7460-1 submittal.

(10) **Inspection requirements.** Discuss daily (or more frequent) inspections and special inspection procedures.

(11) **Underground utilities.** Discuss proposed methods of identifying and protecting underground utilities.

(12) **Penalties.** Penalties should be identified in the CSPP and should not require an entry in the SPCD.

(13) **Special conditions.** Discuss proposed actions for each special condition identified in the CSPP.

(14) **Runway and taxiway visual aids.** Including marking, lighting, signs, and visual NAVAIDs. Discuss proposed visual aids including the following:

- (a) Equipment and methods for covering signage and airfield lights.
- (b) Equipment and methods for temporary closure markings (paint, fabric, other).
- (c) Types of temporary Visual Guidance Slope Indicators (VGSI).

**(15) Marking and signs for access routes.** Discuss proposed methods of demarcating access routes for vehicle drivers.

**(16) Hazard marking and lighting.** Discuss proposed equipment and methods for identifying excavation areas.

**(17) Protection of runway and taxiway safety areas.** including object free areas, obstacle free zones, and approach/departure surfaces. Discuss proposed methods of identifying, demarcating, and protecting airport surfaces including:

- (a) Equipment and methods for maintaining Taxiway Safety Area standards.
- (b) Equipment and methods for separation of construction operations from aircraft operations, including details of barricades.

**(18) Other limitations on construction** should be identified in the CSPP and should not require an entry in the SPCD.

## Section 2. Plan Requirements

**205. Coordination.** Airport operators, or tenants conducting construction on their leased properties, should use predesign, prebid, and preconstruction conferences to introduce the subject of airport operational safety during construction (see AC 150/5300-9). In addition, the following should be coordinated as required:

**a. Contractor Progress Meetings.** Operational safety should be a standing agenda item for discussion during progress meetings throughout the project.

**b. Scope or Schedule Changes.** Changes in the scope or duration of the project may necessitate revisions to the CSPP and review and approval by the airport operator and the FAA.

**c. FAA ATO Coordination.** Early coordination with FAA ATO is required to schedule airway facility shutdowns and restarts. Relocation or adjustments to NAVAIDs, or changes to final grades in critical areas, may require an FAA flight inspection prior to restarting the facility. Flight inspections must be coordinated and scheduled well in advance of the intended facility restart. Flight inspections may require a reimbursable agreement between the airport operator and FAA ATO. Reimbursable agreements should be coordinated a minimum of 12 months prior to the start of construction. (See 213.e(3)(b) for required FAA notification regarding FAA owned NAVAIDs.)

**206. Phasing.** Once it has been determined what types and levels of airport operations will be maintained, the most efficient sequence of construction may not be feasible. In such a case, the sequence of construction may be phased to gain maximum efficiency while allowing for the required operations. The development of the resulting construction phases should be coordinated with local Air Traffic personnel and airport users. The sequenced construction phases established in the CSPP must be incorporated into the project design and must be reflected in the contract drawings and specifications.

**a. Phase Elements.** For each phase the CSPP should detail:

- Areas closed to aircraft operations

- Duration of closures
- Taxi routes
- ARFF access routes
- Construction staging areas
- Construction access and haul routes
- Impacts to NAVAIDs
- Lighting and marking changes
- Available runway length
- Declared distances (if applicable)
- Required hazard marking and lighting
- Lead times for required notifications

**b. Construction Safety Drawings.** Drawings specifically indicating operational safety procedures and methods in affected areas (that is, construction safety drawings) should be developed for each construction phase. Such drawings should be included in the CSPP as referenced attachments and should likewise be included in the contract drawing package.

**207. Areas and Operations Affected by Construction Activity.** Runways and taxiways should remain in use by aircraft to the maximum extent possible without compromising safety. Pre-meetings with the FAA Air Traffic Organization (ATO) will support operational simulations. See Chapter 3 for an example of a table showing temporary operations versus current operations.

**a. Identification of Affected Areas.** Identifying areas and operations affected by the construction will help to determine possible safety problems. The affected areas should be identified in the construction safety drawings for each construction phase. (See 206.b above.) Of particular concern are:

**(1) Closing, or partial closing, of runways, taxiways and aprons.** When a runway is partially closed, a portion of the pavement is unavailable for any aircraft operation, meaning taxiing, landing, or taking off in either direction on that pavement is prohibited. A displaced threshold, by contrast, is established to ensure obstacle clearance and adequate safety area for landing aircraft. The pavement prior to the displaced threshold is available for take-off in the direction of the displacement and for landing and taking off in the opposite direction. Misunderstanding this difference, and issuance of a subsequently inaccurate NOTAM, can lead to a hazardous condition.

**(2) Closing of Aircraft Rescue and Fire Fighting access routes.**

**(3) Closing of access routes used by airport and airline support vehicles.**

**(4) Interruption of utilities, including water supplies for fire fighting.**

**(5) Approach/departure surfaces affected by heights of objects.**

**(6) Construction areas, storage areas, and access routes near runways, taxiways, aprons, or helipads.**

**b. Mitigation of Effects.** Establishment of specific procedures is necessary to maintain the safety and efficiency of airport operations. The CSPP must address:

**(1) Temporary changes to runway and/or taxi operations.**

**(2) Detours for ARFF and other airport vehicles.**

- (3) **Maintenance of essential utilities.**
- (4) **Temporary changes to air traffic control procedures. Such changes must be coordinated with the ATO.**

**208. Navigation Aid (NAVAID) Protection.** Before commencing construction activity, parking vehicles, or storing construction equipment and materials near a NAVAID, coordinate with the appropriate FAA ATO/Technical Operations office to evaluate the effect of construction activity and the required distance and direction from the NAVAID. (See paragraph 213.e(3) below.) Construction activities, materials/equipment storage, and vehicle parking near electronic NAVAIDs require special consideration since they may interfere with signals essential to air navigation. If any NAVAID may be affected, the CSPP and SPCD must show an understanding of the “critical area” associated with each NAVAID and describe how it will be protected. Where applicable, the operational critical areas of NAVAIDs should be graphically delineated on the project drawings. Pay particular attention to stockpiling material, as well as to movement and parking of equipment that may interfere with line of sight from the ATCT or with electronic emissions. Interference from construction equipment and activities may require NAVAID shutdown or adjustment of instrument approach minimums for low visibility operations. This condition requires that a NOTAM be filed (see paragraph 213.b below). Construction activities and materials/equipment storage near a NAVAID must not obstruct access to the equipment and instruments for maintenance. Submittal of a 7460-1 form is required for construction vehicles operating near FAA NAVAIDs. (See paragraph 213.e(1) below.)

**209. Contractor Access.** The CSPP must detail the areas to which the contractor must have access, and explain how contractor personnel will access those areas. Specifically address:

**a. Location of Stockpiled Construction Materials.** Stockpiled materials and equipment storage are not permitted within the RSA and OFZ, and if possible should not be permitted within the Object Free Area (OFA) of an operational runway. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval. The airport operator must ensure that stockpiled materials and equipment adjacent to these areas are prominently marked and lighted during hours of restricted visibility or darkness. (See paragraph 218.b below.) This includes determining and verifying that materials are stabilized and stored at an approved location so as not to be a hazard to aircraft operations and to prevent attraction of wildlife and foreign object damage. See paragraphs 210 and 211 below.

**b. Vehicle and Pedestrian Operations.** The CSPP should include specific vehicle and pedestrian requirements. Vehicle and pedestrian access routes for airport construction projects must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the AOA. The airport operator should coordinate requirements for vehicle operations with airport tenants, contractors, and the FAA air traffic manager. In regard to vehicle and pedestrian operations, the CSPP should include the following, and detail associated training requirements:

(1) **Construction site parking.** Designate in advance vehicle parking areas for contractor employees to prevent any unauthorized entry of persons or vehicles onto the AOA. These areas should provide reasonable contractor employee access to the job site.

(2) **Construction equipment parking.** Contractor employees must park and service all construction vehicles in an area designated by the airport operator outside the OFZ and never in the safety area of an active runway or taxiway. Unless a complex setup procedure makes movement of specialized equipment infeasible, inactive equipment must not be parked on a closed taxiway or runway. If it is necessary to leave specialized equipment on a closed taxiway or runway at night, the equipment must be well lighted. Employees should also park construction vehicles outside the OFA when not in use by

construction personnel (for example, overnight, on weekends, or during other periods when construction is not active). Parking areas must not obstruct the clear line of sight by the ATCT to any taxiways or runways under air traffic control nor obstruct any runway visual aids, signs, or navigation aids. The FAA must also study those areas to determine effects on airport design criteria, surfaces established by 14 CFR Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace (Part 77), and on NAVAIDs and Instrument Approach Procedures (IAP). See paragraph 213.e(1) below for further information.

**(3) Access and haul roads.** Determine the construction contractor's access to the construction sites and haul roads. Do not permit the construction contractor to use any access or haul roads other than those approved. Access routes used by contractor vehicles must be clearly marked to prevent inadvertent entry to areas open to airport operations. Pay special attention to ensure that if construction traffic is to share or cross any ARFF routes that ARFF right of way is not impeded at any time, and that construction traffic on haul roads does not interfere with NAVAIDs or approach surfaces of operational runways.

**(4) Marking and lighting of vehicles** in accordance with AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport.

**(5) Description of proper vehicle operations** on various areas under normal, lost communications, and emergency conditions.

**(6) Required escorts.**

**(7) Training requirements for vehicle drivers** to ensure compliance with the airport operator's vehicle rules and regulations. Specific training should be provided to those vehicle operators providing escorts. See AC 150/5210-20, Ground Vehicle Operations on Airports, for information on training and records maintenance requirements.

**(8) Situational awareness.** Vehicle drivers must confirm by personal observation that no aircraft is approaching their position (either in the air or on the ground) when given clearance to cross a runway, taxiway, or any other area open to airport operations. In addition, it is the responsibility of the escort vehicle driver to verify the movement/position of all escorted vehicles at any given time.

**(9) Two-way radio communication procedures.**

(a) General. The airport operator must ensure that tenant and construction contractor personnel engaged in activities involving unescorted operation on aircraft movement areas observe the proper procedures for communications, including using appropriate radio frequencies at airports with and without ATCT. When operating vehicles on or near open runways or taxiways, construction personnel must understand the critical importance of maintaining radio contact, as directed by the airport operator, with:

(i) Airport operations

(ii) ATCT

(iii) Common Traffic Advisory Frequency (CTAF), which may include UNICOM, MULTICOM.

(iv) Automatic Terminal Information Service (ATIS). This frequency is useful for monitoring conditions on the airport. Local air traffic will broadcast information regarding construction related runway closures and "shortened" runways on the ATIS frequency.

(b) Areas requiring two-way radio communication with the ATCT. Vehicular traffic crossing active movement areas must be controlled either by two-way radio with the ATCT, escort, flagman, signal light, or other means appropriate for the particular airport.

(c) Frequencies to be used. The airport operator will specify the frequencies to be used by the contractor, which may include the CTAF for monitoring of aircraft operations. Frequencies may also be assigned by the airport operator for other communications, including any radio frequency in compliance with Federal Communications Commission requirements. At airports with an ATCT, the airport operator will specify the frequency assigned by the ATCT to be used between contractor vehicles and the ATCT.

(d) Proper radio usage, including read back requirements.

(e) Proper phraseology, including the International Phonetic Alphabet.

(f) Light gun signals. Even though radio communication is maintained, escort vehicle drivers must also familiarize themselves with ATCT light gun signals in the event of radio failure. See the FAA safety placard “Ground Vehicle Guide to Airport Signs and Markings.” This safety placard may be downloaded through the Runway Safety Program Web site at [http://www.faa.gov/airports/runway\\_safety/publications/](http://www.faa.gov/airports/runway_safety/publications/) (See “Signs & Markings Vehicle Dashboard Sticker”.) or obtained from the FAA Airports Regional Office.

**(10) Maintenance of the secured area of the airport, including:**

(a) Fencing and gates. Airport operators and contractors must take care to maintain security during construction when access points are created in the security fencing to permit the passage of construction vehicles or personnel. Temporary gates should be equipped so they can be securely closed and locked to prevent access by animals and unauthorized people. Procedures should be in place to ensure that only authorized persons and vehicles have access to the AOA and to prohibit “piggybacking” behind another person or vehicle. The Department of Transportation (DOT) document DOT/FAA/AR-00/52, Recommended Security Guidelines for Airport Planning and Construction, provides more specific information on fencing. A copy of this document can be obtained from the Airport Consultants Council, Airports Council International, or American Association of Airport Executives.

(b) Badging requirements.

(c) Airports subject to 49 CFR Part 1542, Airport Security, must meet standards for access control, movement of ground vehicles, and identification of construction contractor and tenant personnel.

**210. Wildlife Management.** The CSPP and SPCD must be in accordance with the airport operator’s wildlife hazard management plan, if applicable. See also AC 150/5200-33, Hazardous Wildlife Attractants On or Near Airports, and Certalert 98-05, Grasses Attractive to Hazardous Wildlife. Construction contractors must carefully control and continuously remove waste or loose materials that might attract wildlife. Contractor personnel must be aware of and avoid construction activities that can create wildlife hazards on airports, such as:

**a. Trash.** Food scraps must be collected from construction personnel activity.

**b. Standing Water.**

**c. Tall Grass and Seeds.** Requirements for turf establishment can be at odds with requirements for wildlife control. Grass seed is attractive to birds. Lower quality seed mixtures can contain seeds of plants (such as clover) that attract larger wildlife. Seeding should comply with the guidance in AC 150/5370-10, Standards for Specifying Construction of Airports, Item T-901, Seeding. Contact the local office of the United States Department of Agriculture Soil Conservation Service or the State University Agricultural Extension Service (County Agent or equivalent) for assistance and recommendations. These agencies can also provide liming and fertilizer recommendations.

**d. Poorly Maintained Fencing and Gates.** See 209.b(10)(a) above.

**e. Disruption of Existing Wildlife Habitat.** While this will frequently be unavoidable due to the nature of the project, the CSPP should specify under what circumstances (location, wildlife type) contractor personnel should immediately notify the airport operator of wildlife sightings.

**211. Foreign Object Debris (FOD) Management.** Waste and loose materials, commonly referred to as FOD, are capable of causing damage to aircraft landing gears, propellers, and jet engines. Construction contractors must not leave or place FOD on or near active aircraft movement areas. Materials capable of creating FOD must be continuously removed during the construction project. Fencing (other than security fencing) may be necessary to contain material that can be carried by wind into areas where aircraft operate. See AC 150/5210-24, Foreign Object Debris (FOD) Management.

**212. Hazardous Materials (HAZMAT) Management.** Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks. Transport and handling of other hazardous materials on an airport also requires special procedures. See AC 150/5320-15, Management of Airport Industrial Waste.

**213. Notification of Construction Activities.** The CSPP and SPCD must detail procedures for the immediate notification of airport users and the FAA of any conditions adversely affecting the operational safety of the airport. It must address the notification actions described below, as applicable.

**a. List of Responsible Representatives/** points of contact for all involved parties, and procedures for contacting each of them, including after hours.

**b. NOTAMs.** Only the airport operator may initiate or cancel NOTAMs on airport conditions, and is the only entity that can close or open a runway. The airport operator must coordinate the issuance, maintenance, and cancellation of NOTAMs about airport conditions resulting from construction activities with tenants and the local air traffic facility (control tower, approach control, or air traffic control center), and must provide information on closed or hazardous conditions on airport movement areas to the FAA Flight Service Station (FSS) so it can issue a NOTAM. The airport operator must file and maintain a list of authorized representatives with the FSS. Refer to AC 150/5200-28, Notices to Airmen (NOTAMs) for Airport Operators, for a sample NOTAM form. Only the FAA may issue or cancel NOTAMs on shutdown or irregular operation of FAA owned facilities. Any person having reason to believe that a NOTAM is missing, incomplete, or inaccurate must notify the airport operator. See paragraph 207.a(1) above regarding issuing NOTAMs for partially closed runways versus runways with displaced thresholds.

**c. Emergency notification procedures** for medical, fire fighting, and police response.

**d. Coordination with ARFF.** The CSPP must detail procedures for coordinating through the airport sponsor with ARFF personnel, mutual aid providers, and other emergency services if construction requires:

- The deactivation and subsequent reactivation of water lines or fire hydrants, or
- The rerouting, blocking and restoration of emergency access routes, or
- The use of hazardous materials on the airfield.

**e. Notification to the FAA.**

**(1) Part 77.** Any person proposing construction or alteration of objects that affect navigable airspace, as defined in Part 77, must notify the FAA. This includes construction equipment and proposed

parking areas for this equipment (i.e. cranes, graders, other equipment) on airports. FAA Form 7460-1, Notice of Proposed Construction or Alteration, can be used for this purpose and submitted to the appropriate FAA Airports Regional or District Office. See Appendix 1, Related Reading Material, to download the form. Further guidance is available on the FAA web site at [oeaaa.faa.gov](http://oeaaa.faa.gov).

**(2) Part 157.** With some exceptions, Title 14 CFR Part 157, Notice of Construction, Alteration, Activation, and Deactivation of Airports, requires that the airport operator notify the FAA in writing whenever a non-Federally funded project involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport. Notification involves submitting FAA Form 7480-1, Notice of Landing Area Proposal, to the nearest FAA Airports Regional or District Office. See Appendix 1, Related Reading Material to download the form.

**(3) NAVAIDS.** For emergency (short-notice) notification about impacts to both airport owned and FAA owned NAVAIDs, contact: 866-432-2622.

(a) Airport owned/FAA maintained. If construction operations require a shutdown of more than 24 hours, or more than 4 hours daily on consecutive days, of a NAVAID owned by the airport but maintained by the FAA, provide a 45-day minimum notice to FAA ATO/Technical Operations prior to facility shutdown.

(b) FAA owned.

(i) General. The airport operator must notify the appropriate FAA ATO Service Area Planning and Requirements (P&R) Group a minimum of 45 days prior to implementing an event that causes impacts to NAVAIDs. (Impacts to FAA equipment covered by a Reimbursable Agreement (RA) do not have to be reported by the airport operator.)

(ii) Coordinate work for an FAA owned NAVAID shutdown with the local FAA ATO/Technical Operations office, including any necessary reimbursable agreements and flight checks. Detail procedures that address unanticipated utility outages and cable cuts that could impact FAA NAVAIDs. In addition, provide seven days notice to schedule the actual shutdown.

## **214. Inspection Requirements.**

**a. Daily Inspections.** Inspections should be conducted at least daily, but more frequently if necessary to ensure conformance with the CSPP. A sample checklist is provided in Appendix 3, Safety and Phasing Plan Checklist. See also AC 150/5200-18, Airport Safety Self-Inspection.

**b. Final Inspections.** New runways and extended runway closures may require safety inspections at certificated airports prior to allowing air carrier service. Coordinate with the FAA Airport Certification Safety Inspector (ACSI) to determine if a final inspection will be necessary.

**215. Underground Utilities.** The CSPP and/or SPCD must include procedures for locating and protecting existing underground utilities, cables, wires, pipelines, and other underground facilities in excavation areas. This may involve coordinating with public utilities and FAA ATO/Technical Operations. Note that “One Call” or “Miss Utility” services do not include FAA ATO/Technical Operations

**216. Penalties.** The CSPP should detail penalty provisions for noncompliance with airport rules and regulations and the safety plans (for example, if a vehicle is involved in a runway incursion). Such penalties typically include rescission of driving privileges or access to the AOA.

**217. Special Conditions.** The CSPP must detail any special conditions that affect the operation of the

airport and will require the activation of any special procedures (for example, low-visibility operations, snow removal, aircraft in distress, aircraft accident, security breach, Vehicle / Pedestrian Deviation (VPD) and other activities requiring construction suspension/resumption).

**218. Runway and Taxiway Visual Aids.** Includes marking, lighting, signs, and visual NAVAIDS. The CSPP must ensure that areas where aircraft will be operating are clearly and visibly separated from construction areas, including closed runways. Throughout the duration of the construction project, verify that these areas remain clearly marked and visible at all times and that marking, lighting, signs, and visual NAVAIDS remain in place and operational. The CSPP must address the following, as appropriate:

**a. General.** Airport markings, lighting, signs, and visual NAVAIDS must be clearly visible to pilots, not misleading, confusing, or deceptive. All must be secured in place to prevent movement by prop wash, jet blast, wing vortices, or other wind currents and constructed of materials that would minimize damage to an aircraft in the event of inadvertent contact.

**b. Markings.** Markings must be in compliance with the standards of AC 150/5340-1, Standards for Airport Markings. Runways and runway exit taxiways closed to aircraft operations are marked with a yellow X. The preferred visual aid to depict temporary runway closure is the lighted X signal placed on or near the runway designation numbers. (See paragraph 218.b(1)(b) below.)

**(1) Closed Runways and Taxiways.**

(a) **Permanently Closed Runways.** For runways, obliterate the threshold marking, runway designation marking, and touchdown zone markings, and place Xs at each end and at 1,000-foot (300 m) intervals.

(b) **Temporarily Closed Runways.** For runways that have been temporarily closed, place an X at the each end of the runway directly on or as near as practicable to the runway designation numbers. Figure 2-1 illustrates.



**Figure 2-1 Markings for a Temporarily Closed Runway**

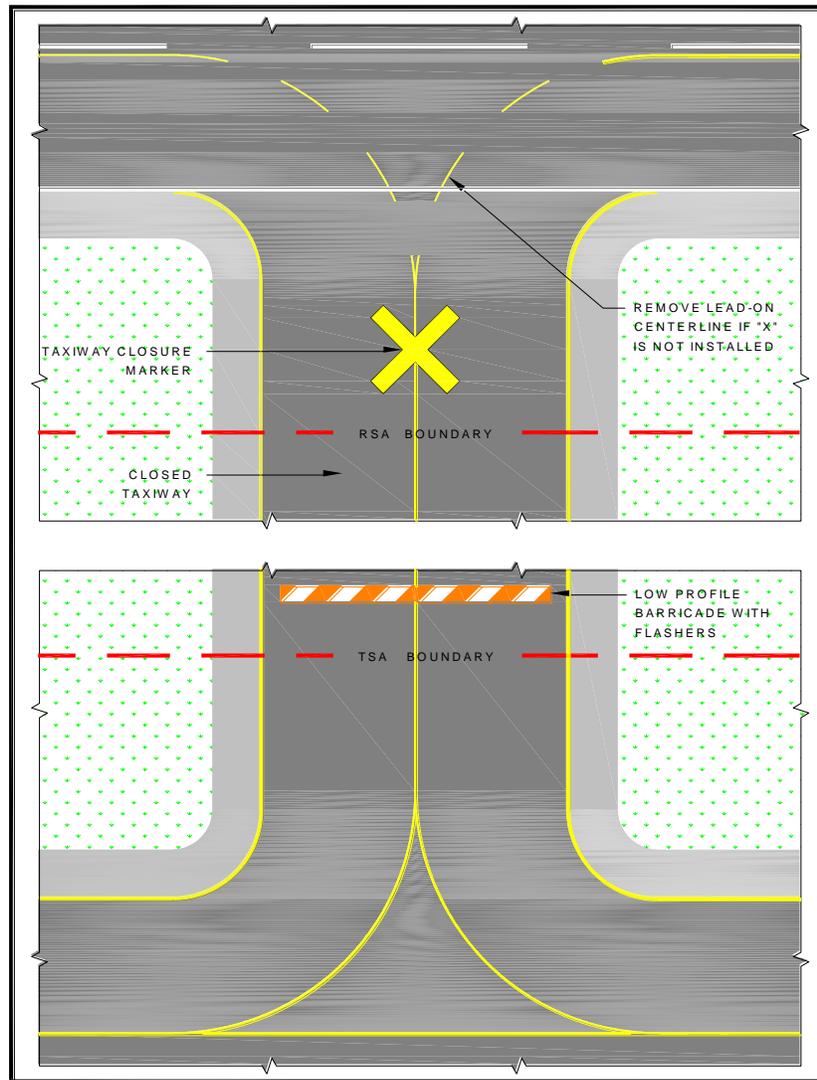
(c) **Partially Closed Runways and Displaced Thresholds.** When threshold markings are needed to identify the temporary beginning of the runway that is available for landing, the markings must comply with AC 150/5340-1. An X is not used on a partially closed runway or a runway with a displaced threshold. See paragraph 207.a(1) above for the difference between partially closed runways and runways with displaced thresholds.

(i) **Partially Closed Runways.** Pavement markings for temporary closed portions of the runway consist of a runway threshold bar and yellow chevrons to identify pavement areas that are unsuitable for takeoff or landing (see AC 150/5340-1).

(ii) **Displaced Thresholds.** Pavement markings for a displaced threshold consist of a runway threshold bar and white arrowheads with and without arrow shafts. These markings are required to identify the portion of the runway before the displaced threshold to provide centerline guidance for pilots during approaches, takeoffs, and landing rollouts from the opposite direction. See AC 150/5340-1.

## (d) Taxiways.

(i) Permanently Closed Taxiways. AC 150/5300-13 notes that it is preferable to remove the pavement, but for pavement that is to remain, place an X at the entrance to both ends of the closed section. Obliterate taxiway centerline markings, including runway leadoff lines, leading to the closed taxiway. Figure 2-2 illustrates.



**Figure 2-2 Taxiway Closure**

(ii) Temporarily Closed Taxiways. Place barricades outside the safety area of intersecting taxiways. For runway/taxiway intersections, place an X at the entrance to the closed taxiway from the runway. If the taxiway will be closed for an extended period, obliterate taxiway centerline markings, including runway leadoff lines, leading to the closed section. If the centerline markings will be reused upon reopening the taxiway, it is preferable to paint over the marking. This will result in less damage to the pavement when the upper layer of paint is ultimately removed.

(e) Temporarily Closed Airport. When the airport is closed temporarily, mark all the runways as closed.

(2) If unable to paint temporary markings on the pavement, construct them from any of the following materials: fabric, colored plastic, painted sheets of plywood, or similar materials. They must be properly configured and appropriately secured to prevent movement by prop wash, jet blast, or other wind currents.

(3) It may be necessary to remove or cover runway markings, including but not limited to, runway designation markings, threshold markings, centerline markings, edge stripes, touchdown zone markings and aiming point markings, depending on the length of construction and type of activity at the airport. When removing runway markings, apply the same treatment to areas between stripes or numbers, as the cleaned area will appear to pilots as a marking in the shape of the treated area.

(4) If it is not possible to install threshold bars, chevrons, and arrows on the pavement, temporary outboard markings may be used. Locate them outside of the runway pavement surface on both sides of the runway. The dimension along the runway direction must be the same as if installed on the pavement. The lateral dimension must be at least one-half that of on-pavement markings. If the markings are not discernible on grass or snow, apply a black background with appropriate material over the ground to ensure they are clearly visible.

(5) The application rate of paint to mark a short-term temporary runway and taxiway markings may deviate from the standard (see Item P-620, "Runway and Taxiway Painting," in AC 150/5370-10), but the dimensions must meet the existing standards.

**c. Lighting and Visual NAVAIDs.** This paragraph refers to standard runway and taxiway lighting systems. See below for hazard lighting. Lighting must be in conformance with AC 150/5340-30, Design and Installation Details for Airport Visual Aids, and AC 150/5345-50, Specification for Portable Runway and Taxiway Lights. When disconnecting runway and taxiway lighting fixtures, disconnect the associated isolation transformers. Alternately, cover the light fixture in such a way as to prevent light leakage. Avoid removing the lamp from energized fixtures because an excessive number of isolation transformers with open secondaries may damage the regulators and/or increase the current above its normal value. Secure, identify, and place any above ground temporary wiring in conduit to prevent electrocution and fire ignition sources.

**(1) Permanently Closed Runways and Taxiways.** For runways and taxiways that have been permanently closed, disconnect the lighting circuits.

(2) **Temporarily Closed Runways.** If available, use a lighted X, both at night and during the day, placed at each end of the runway facing the approach. The use of a lighted X is required if night work requires runway lighting to be on. See AC 150/5345-55, Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure. For runways that have been temporarily closed, but for an extended period, and for those with pilot controlled lighting, disconnect the lighting circuits or secure switches to prevent inadvertent activation. For runways that will be opened periodically, coordinate procedures with the FAA air traffic manager or, at airports without an ATCT, the airport operator. Activate stop bars if available. Figure 2-3 shows a lighted X by day. Figure 2-4 shows a lighted X at night.



**Figure 2-3 Lighted X in Daytime**



**Figure 2-4 Lighted X at Night**

(3) **Partially Closed Runways and Displaced Thresholds.** When a runway is partially closed, a portion of the pavement is unavailable for any aircraft operation, meaning taxiing and landing or

taking off in either direction. A displaced threshold, by contrast, is put in place to ensure obstacle clearance by landing aircraft. The pavement prior to the displaced threshold is available for takeoff in the direction of the displacement, and for landing and takeoff in the opposite direction. Misunderstanding this difference and issuance of a subsequently inaccurate NOTAM can result in a hazardous situation. For both partially closed runways and displaced thresholds, approach lighting systems at the affected end must be placed out of service

(a) **Partially Closed Runways.** Disconnect edge and threshold lights on that part of the runway at and behind the threshold (that is, the portion of the runway that is closed). Alternately, cover the light fixture in such a way as to prevent light leakage.

(b) **Displaced Thresholds.** Edge lighting in the area of the displacement emits red light in the direction of approach and yellow light in the opposite direction. Centerline lights are blanked out in the direction of approach if the displacement is 700 ft or less. If the displacement is over 700 ft, place the centerline lights out of service. See AC 150/5340-30 for details on lighting displaced thresholds.

(c) Temporary runway thresholds and runway ends must be lighted if the runway is lighted and it is the intended threshold for night landings or instrument meteorological conditions.

(d) A temporary threshold on an unlighted runway may be marked by retroreflective, elevated markers in addition to markings noted in paragraph 218.b(1)(c) above. Markers seen by aircraft on approach are green. Markers at the rollout end of the runway are red. At certificated airports, temporary elevated threshold markers must be mounted with a frangible fitting (see 14 CFR Part 139.309). At non-certificated airports, the temporary elevated threshold markings may either be mounted with a frangible fitting or be flexible. See AC 150/5345-39, Specification for L-853, Runway and Taxiway Retroreflective Markers.

(e) Temporary threshold lights and end lights and related visual NAVAIDs are installed outboard of the edges of the full-strength pavement only when they cannot be installed on the pavement. They are installed with bases at grade level or as low as possible, but not more than 3 in (7.6 cm) above ground. When any portion of a base is above grade, place properly compacted fill around the base to minimize the rate of gradient change so aircraft can, in an emergency, cross at normal landing or takeoff speeds without incurring significant damage. See AC 150/5370-10.

(f) Maintain threshold and edge lighting color and spacing standards as described in AC 150/5340-30. Battery powered, solar, or portable lights that meet the criteria in AC 150/5345-50 may be used. These systems are intended primarily for visual flight rules (VFR) aircraft operations but may be used for instrument flight rules (IFR) aircraft operations, upon individual approval from the Flight Standards Division of the applicable FAA Regional Office.

(g) Reconfigure yellow lenses (caution zone), as necessary. If the runway has centerline lights, reconfigure the red lenses, as necessary, or place the centerline lights out of service.

(h) Relocate the visual glide slope indicator (VGSI), such as VASI and PAPI; other airport lights, such as Runway End Identifier Lights (REIL); and approach lights to identify the temporary threshold. Another option is to disable the VGSI or any equipment that would give misleading indications to pilots as to the new threshold location. Installation of temporary visual aids may be necessary to provide adequate guidance to pilots on approach to the affected runway. If the FAA owns and operates the VGSI, coordinate its installation or disabling with the local ATO/Technical Operations Office. Relocation of such visual aids will depend on the duration of the project and the benefits gained from the relocation, as this can result in great expense.

(i) Issue a NOTAM to inform pilots of temporary lighting conditions.

**(4) Temporarily Closed Taxiways.** If possible, deactivate the taxiway lighting circuits. When deactivation is not possible (for example other taxiways on the same circuit are to remain open),

cover the light fixture in such a way as to prevent light leakage.

**d. Signs.** To the extent possible, signs must be in conformance with AC 150/5345-44, Specification for Runway and Taxiway Signs and AC 150/5340-18, Standard for Airport Sign Systems. Any time a sign does not serve its normal function; it must be covered or removed to prevent misdirecting pilots. Note that information signs identifying a crossing taxiway continue to perform their normal function even if the crossing taxiway is closed. For long term construction projects, consider relocating signs, especially runway distance remaining signs.

**219. Marking and Signs for Access Routes.** The CSPP should indicate that pavement markings and signs for construction personnel will conform to AC 150/5340-18 and, to the extent practicable, with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications. Signs adjacent to areas used by aircraft must comply with the frangibility requirements of AC 150/5220-23, Frangible Connections, which may require modification to size and height guidance in the MUTCD.

## **220. Hazard Marking, Lighting and Signing.**

**a. Hazard Marking and Lighting Prevents Pilots** from entering areas closed to aircraft, and prevents construction personnel from entering areas open to aircraft. The CSPP must specify prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles. Hazard marking and lighting must also be specified to identify open manholes, small areas under repair, stockpiled material, waste areas, and areas subject to jet blast. Also consider less obvious construction-related hazards and include markings to identify FAA, airport, and National Weather Service facilities cables and power lines; instrument landing system (ILS) critical areas; airport surfaces, such as RSA, OFA, and OFZ; and other sensitive areas to make it easier for contractor personnel to avoid these areas.

### **b. Equipment.**

**(1) Barricades**, including traffic cones, (weighted or sturdily attached to the surface) are acceptable methods used to identify and define the limits of construction and hazardous areas on airports. Careful consideration must be given to selecting equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast. The spacing of barricades must be such that a breach is physically prevented barring a deliberate act. For example, if barricades are intended to exclude vehicles, gaps between barricades must be smaller than the width of the excluded vehicles, generally 4 ft. Provision must be made for ARFF access if necessary. If barricades are intended to exclude pedestrians, they must be continuously linked. Continuous linking may be accomplished through the use of ropes, securely attached to prevent FOD.

**(2) Lights must be red**, either steady burning or flashing, and must meet the luminance requirements of the State Highway Department. Batteries powering lights will last longer if lights flash. Lights must be mounted on barricades and spaced at no more than 10 ft. Lights must be operated between sunset and sunrise and during periods of low visibility whenever the airport is open for operations. They may be operated by photocell, but this may require that the contractor turn them on manually during periods of low visibility during daytime hours.

**(3) Supplement barricades with signs** (for example “No Entry,” “No Vehicles”) as necessary.

**(4) Air Operations Area – General.** Barricades are not permitted in any active safety area. Within a runway or taxiway object free area, and on aprons, use orange traffic cones, flashing or steady burning red lights as noted above, collapsible barricades marked with diagonal, alternating orange and

white stripes; and/or signs to separate all construction/maintenance areas from the movement area. Barricades may be supplemented with alternating orange and white flags at least 20 by 20 in (50 by 50 cm) square and securely fastened to eliminate FOD. All barricades adjacent to any open runway or taxiway / taxilane safety area, or apron must be as low as possible to the ground, and no more than 18 in high, exclusive of supplementary lights and flags. Barricades must be of low mass; easily collapsible upon contact with an aircraft or any of its components; and weighted or sturdily attached to the surface to prevent displacement from prop wash, jet blast, wing vortex, or other surface wind currents. If affixed to the surface, they must be frangible at grade level or as low as possible, but not to exceed 3 in (7.6 cm) above the ground. Figure 2-5 and Figure 2-6 show sample barricades with proper coloring and flags.



**Figure 2-5 Interlocking Barricades**



**Figure 2-6 Low Profile Barricades**

**(5) Air Operations Area – Runway/Taxiway Intersections.** Use highly reflective barricades with lights to close taxiways leading to closed runways. Evaluate all operating factors when determining how to mark temporary closures that can last from 10 to 15 minutes to a much longer period of time. However, even for closures of relatively short duration, close all taxiway/runway intersections with barricades. The use of traffic cones is appropriate for short duration closures.

**(6) Air Operations Area – Other.** Beyond runway and taxiway object free areas and

aprons, barricades intended for construction vehicles and personnel may be many different shapes and made from various materials, including railroad ties, sawhorses, jersey barriers, or barrels.

(7) **Maintenance.** The construction specifications must include a provision requiring the contractor to have a person on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades. The contractor must file the contact person's information with the airport operator. Lighting should be checked for proper operation at least once per day, preferably at dusk.

**221. Protection of Runway and Taxiway Safety Areas.** Runway and taxiway safety areas, Obstacle Free zones (OFZ), object free areas (OFA), and approach surfaces are described in AC 150/5300-13. Protection of these areas includes limitations on the location and height of equipment and stockpiled material. An FAA airspace study may be required. Coordinate with the appropriate FAA Airports Regional or District Office if there is any doubt as to requirements or dimensions (See paragraph 213.e above.) as soon as the location and height of materials or equipment are known. The CSPP should include drawings showing all safety areas, object free areas, obstacle free zones and approach departure surfaces affected by construction.

**a. Runway Safety Area (RSA).** A runway safety area is the defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway (see AC 150/5300-13). Construction activities within the existing RSA are subject to the following conditions:

(1) **No construction may occur within the existing RSA** while the runway is open for aircraft operations. The RSA dimensions may be temporarily adjusted if the runway is restricted to aircraft operations requiring an RSA that is equal to the RSA width and length beyond the runway ends available during construction. (see AC 150/5300-13). The temporary use of declared distances and/or partial runway closures may provide the necessary RSA under certain circumstances. Coordinate with the appropriate FAA Airports Regional or District Office to have declared distances information published. See AC 150/5300-13 for guidance on the use of declared distances.

(2) **The airport operator must coordinate** the adjustment of RSA dimensions as permitted above with the appropriate FAA Airports Regional or District Office and the local FAA air traffic manager and issue a NOTAM.

(3) **The CSPP and SPCD must provide procedures** for ensuring adequate distance for protection from blasting operations, if required by operational considerations.

(4) **Excavations.**

(a) Open trenches or excavations are not permitted within the RSA while the runway is open. If possible, backfill trenches before the runway is opened. If the runway must be opened before excavations are backfilled, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the runway across the trench without damage to the aircraft.

(b) Construction contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

(5) **Erosion Control.** Soil erosion must be controlled to maintain RSA standards, that is, the RSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

**b. Runway Object Free Area (ROFA).** Construction, including excavations, may be permitted in the ROFA. However, equipment must be removed from the ROFA when not in use, and material should not be stockpiled in the ROFA if not necessary. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval.

**c. Taxiway Safety Area (TSA).** A taxiway safety area is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. (See AC 150/5300-13.) Construction activities within the TSA are subject to the following conditions:

**(1) No construction may occur** within the TSA while the taxiway is open for aircraft operations. The TSA dimensions may be temporarily adjusted if the taxiway is restricted to aircraft operations requiring a TSA that is equal to the TSA width available during construction (see AC 150/5300-13, Table 4-1).

**(2) The airport operator must coordinate** the adjustment of the TSA width as permitted above with the appropriate FAA Airports Regional or District Office and the FAA air traffic manager and issue a NOTAM.

**(3) The CSPP and SPCD must provide procedures** for ensuring adequate distance for protection from blasting operations.

**(4) Excavations.**

**(a)** Open trenches or excavations are not permitted within the TSA while the taxiway is open. If possible, backfill trenches before the taxiway is opened. If the taxiway must be opened before excavations are backfilled, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the taxiway across the trench without damage to the aircraft.

**(b)** Construction contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

**(5) Erosion Control.** Soil erosion must be controlled to maintain TSA standards, that is, the TSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

**d. Taxiway Object Free Area (TOFA).** Unlike the Runway Object Free Area, aircraft wings regularly penetrate the taxiway object free area during normal operations. Thus the restrictions are more stringent. Except as provided below, no construction may occur within the taxiway object free area while the taxiway is open for aircraft operations.

**(1) The taxiway object free area dimensions** may be temporarily adjusted if the taxiway is restricted to aircraft operations requiring a taxiway object free area that is equal to the taxiway object free area width available.

**(2) Offset taxiway pavement markings** may be used as a temporary measure to provide the required taxiway object free area. Where offset taxiway pavement markings are provided, centerline lighting or reflectors are required.

**(3) Construction activity may be accomplished** without adjusting the width of the taxiway object free area, subject to the following restrictions:

- (a) Appropriate NOTAMs are issued.
- (b) Marking and lighting meeting the provisions of paragraphs 218 and 220 above are implemented.
- (c) Five-foot clearance is maintained between equipment and materials and any part of an aircraft (includes wingtip overhang). In these situations, flaggers must be used to direct construction equipment, and wing walkers will be necessary to guide aircraft. Wing walkers should be airline/aviation personnel rather than construction workers. If such clearance can only be maintained if an aircraft does not have full use of the entire taxiway width (with its main landing gear at the edge of the pavement), then it will be necessary to move personnel and equipment for the passage of that aircraft.

**e. Obstacle Free Zone (OFZ).** In general, personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. If a penetration to the OFZ is necessary, it may be possible to continue aircraft operations through operational restrictions. Coordinate with the FAA through the appropriate FAA Airports Regional or District Office.

**f. Runway Approach/Departure Areas and Clearways.** All personnel, materials, and/or equipment must remain clear of the applicable threshold siting surfaces, as defined in Appendix 2, "Threshold Siting Requirements," of AC 150/5300-13. Objects that do not penetrate these surfaces may still be obstructions to air navigation and may affect standard instrument approach procedures. Coordinate with the FAA through the appropriate FAA Airports Regional or District Office.

**(1) Construction activity in a runway approach/departure area** may result in the need to partially close a runway or displace the existing runway threshold. Partial runway closure, displacement of the runway threshold, as well as closure of the complete runway and other portions of the movement area also require coordination through the airport operator with the appropriate FAA air traffic manager (FSS if non-towered) and ATO/Technical Operations (for affected NAVAIDS) and airport users.

**(2) Caution regarding partial runway closures.** When filing a NOTAM for a partial runway closure, clearly state to OCC personnel that the portion of pavement located prior to the threshold is not available for landing and departing traffic. In this case, the threshold has been moved for both landing and takeoff purposes (this is different than a displaced threshold). There may be situations where the portion of closed runway is available for taxiing only. If so, the NOTAM must reflect this condition).

**(3) Caution regarding displaced thresholds.** : Implementation of a displaced threshold affects runway length available for aircraft landing over the displacement. Depending on the reason for the displacement (to provide obstruction clearance or RSA), such a displacement may also require an adjustment in the landing distance available and accelerate-stop distance available in the opposite direction. If project scope includes personnel, equipment, excavation, other work. within the existing RSA of any usable runway end, do not implement a displaced threshold unless arrivals and departures toward the construction activity are prohibited. Instead, implement a partial closure.

**222. Other Limitations on Construction.** The CSPP must specify any other limitations on construction, including but not limited to:

**a. Prohibitions.**

**(1) No use of tall equipment** (cranes, concrete pumps, and so on) unless a 7460-1 determination letter is issued for such equipment.

**(2) No use of open flame welding or torches** unless fire safety precautions are provided and the airport operator has approved their use.

**(3) No use of electrical blasting caps** on or within 1,000 ft (300 m) of the airport property.

See AC 150/5370-10.

(4) **No use of flare pots** within the AOA.

**b. Restrictions.**

(1) **Construction suspension required during specific airport operations.**

(2) **Areas that cannot be worked on simultaneously.**

(3) **Day or night construction restrictions.**

(4) **Seasonal construction restrictions.**

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### Chapter 3. Guidelines for Writing a CSPP

**301. General Requirements.** The CSPP is a standalone document written to correspond with the subjects outlined in Chapter 2, Section 1, paragraph 204. The CSPP is organized by numbered sections corresponding to each subject listed in Chapter 2, Section 1, paragraph 204, and described in detail in Chapter 2, Section 2. Each section number and title in the CSPP matches the corresponding subject outlined in Chapter 2, paragraph 204 (for example, 1. Coordination, 2. Phasing, 3. Areas and Operations Affected by the Construction Activity, and so on.). With the exception of the project scope of work outlined in Section 2. Phasing, only subjects specific to operational safety during construction should be addressed.

**302. Applicability of Subjects.** Each section should, to the extent practical, focus on the specific subject. Where an overlapping requirement spans several sections, the requirement should be explained in detail in the most applicable section. A reference to that section should be included in all other sections where the requirement may apply. For example, the requirement to protect existing underground FAA Instrument Landing System (ILS) cables during trenching operations could be considered FAA ATO coordination (Section 1. Coordination, paragraph 205.c), an area and operation affected by the construction activity (Section 3. Areas and Operations Affected by the Construction Activity, paragraph 207.a(4)), a protection of a NAVAID (Section 4. Protection of Navigational Aids (NAVAIDs), paragraph 208), or a notification to the FAA of construction activities (Section 9. Notification of Construction Activities, paragraph 210.e(3)(b)). However, it is more specifically an underground utility requirement (Section 11. Underground Utilities, paragraph 215). The procedure for protecting underground ILS cables during trenching operations should therefore be described in Section 11: “*The contractor must coordinate with the local FAA System Support Center (SSC) to mark existing ILS cable routes along Runway 17-35. The ILS cables will be located by hand digging whenever the trenching operation moves within 10 feet of the cable markings.*” All other applicable sections should include a reference to Section 11: “*ILS cables shall be identified and protected as described in Section 11*” or “*See Section 11 for ILS cable identification and protection requirements.*” Thus, the CSPP should be considered as a whole, with no need to duplicate responses to related issues.

**303. Graphical Representations.** Construction safety drawings should be included in the CSPP as attachments. When other graphical representations will aid in supporting written statements, the drawings, diagrams, and/or photographs should also be attached to the CSPP. References should be made in the CSPP to each graphical attachment and may be made in multiple sections.

**304. Reference Documents.** The CSPP must not incorporate a document by reference unless reproduction of the material in that document is prohibited. In that case, either copies of or a source for the referenced document must be provided to the contractor.

**305. Restrictions.** The CSPP should not be considered as a project design review document. The CSPP should also avoid mention of permanent (“as-built”) features such as pavements, markings, signs, and lighting, except when such features are intended to aid in maintaining operational safety during the construction.

**306. Coordination.** Include in this section a detailed description of conferences and meetings both before and during the project. Include appropriate information from AC 150/5300-9. Discuss coordination procedures and schedules for each required FAA ATO airway facility shutdown and restart and all required flight inspections.

**307. Phasing.** Include in this section a detailed scope of work description for the project as a whole and each phase of work covered by the CSPP. This includes all locations and durations of the work proposed. Attach drawings to graphically support the written scope of work. Detail in this section the sequenced phases of the proposed construction. Include a reference to paragraph 308 below, as appropriate.

**308. Areas and Operations Affected By Construction.** Focus in this section on identifying the areas and operations affected by the construction. Describe corresponding mitigation that is not covered in detail elsewhere in the CSPP. Include references to paragraphs below as appropriate. Attach drawings as necessary to graphically describe affected areas and mechanisms proposed. Tables and charts such as the following may be helpful in highlighting issues to be addressed.

**Table 3-1 Sample Operations Effects**

Project	Runway 15-33 Reconstruction	
Phase	Phase II: Reconstruct Runway 15 End	
Scope of Work	Reconstruct 1,000 ft of north end of Runway 15-33 with Portland Cement Concrete (PCC).	
Operational Requirements	Normal (Existing)	Phase II (Anticipated)
Runway 15 Average Aircraft Operations	Carrier: 52 /day GA: 26 /day Military: 11 /day	Carrier: 52 / day GA: 20 / day Military: 0 /day
Runway 33 Average Aircraft Operations	Carrier: 40 /day GA: 18 /day Military: 10 /day	Carrier: 20 /day GA: 5 /day Military: 0 /day
Runway 15-33 ARC	C-IV	C-IV
Runway 15 Approach Visibility Minimums	¾ mile	1 mile
Runway 33 Approach Visibility Minimums	¾ mile	1 mile
Runway 15 Declared Distances	TORA: 7,820	TORA: 6,420
	TODA: 7,820	TODA: 6,420
	ASDA: 7,820	ASDA: 6,420
	LDA: 7,820	LDA: 6,420
Runway 33 Declared Distances	TORA: 8,320	TORA: 6,920
	TODA: 8,320	TODA: 6,920
	ASDA: 8,320	ASDA: 6,920
	LDA: 7,820	LDA: 6,420
Runway 15 Approach Procedures	ILS	LOC only
	RNAV	N/A
	VOR	N/A
Runway 33 Approach Procedures	ILS	Visual only
	RNAV	N/A
	VOR	N/A
Runway 15 NAVAIDs	ILS/DME, MALSR, RVR	LOC/DME, PAPI (temp), RVR

<b>Runway 33 NAVAIDs</b>	ILS/DME, MALSF, PAPI, RVR	MALSF, PAPI, RVR
<b>Taxiway G ADG</b>	IV	IV (N/A between T/W H and R/W 15 end)
<b>Taxiway E ADG</b>	IV	IV
<b>ATCT (hours open)</b>	06:00 – 24:00 local	06:00 – 24:00 local
<b>ARFF Index</b>	D	D
<b>Special Conditions</b>	Air National Guard (ANG) military operations	Military operations relocated to alternate ANG Base
	Airline XYZ requires VGSI	Airline XYZ requires VGSI

Complete the following chart for each phase to determine the area that must be protected along the runway edges:

Runway	Aircraft Approach Category* A, B, C, or D	Airplane Design Group* I, II, III, or IV	RSA Width in Feet Divided by 2*
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

\*See AC 150/5300-13 to complete the chart for a specific runway.

Complete the following chart for each phase to determine the area that must be protected before the runway threshold:

Runway End Number	Airplane Design Group* I, II, III, or IV	Aircraft Approach Category* A, B, C, or D	Minimum Safety Area Prior to the Threshold*	Minimum Distance to Threshold Based on Required Approach Slope*	
_____	_____	_____	_____ ft	_____ ft	_____: 1
_____	_____	_____	_____ ft	_____ ft	_____: 1
_____	_____	_____	_____ ft	_____ ft	_____: 1
_____	_____	_____	_____ ft	_____ ft	_____: 1

\*See AC 150/5300-13 to complete the chart for a specific runway.

**309. Navigation Aid (NAVAID) Protection.** List in this section all NAVAID facilities that will be affected by the construction. Identify NAVAID facilities that will be placed out of service at any time prior to or during construction activities. Identify individuals responsible for coordinating each shutdown and when each facility will be out of service. Include a reference to paragraph 306 above for FAA ATO NAVAID shutdown, restart, and flight inspection coordination. Outline in detail procedures to protect each NAVAID facility remaining in service from interference by construction activities. Include a reference to paragraph 314 for the issuance of NOTAMs as required. Include a reference to paragraph 316 for the protection of underground cables and piping serving NAVAIDs. If temporary visual aids are proposed to replace or supplement existing facilities, include a reference to paragraph 319. Attach drawings to graphically indicate the affected NAVAIDS and the corresponding critical areas.

**310. Contractor Access.** This will necessarily be the most extensive section of the CSPP. Provide

sufficient detail so that a contractor not experienced in working on airports will understand the unique restrictions such work will require. Due to this extent, it should be broken down into subsections as described below:

**a. Location of Stockpiled Construction Materials.** Describe in this section specific locations for stockpiling material. Note any height restrictions on stockpiles. Include a reference to paragraph 321 for hazard marking and lighting devices used to identify stockpiles. Include a reference to paragraph 311 for provisions to prevent stockpile material from becoming wildlife attractants. Include a reference to paragraph 312 for provisions to prevent stockpile material from becoming FOD. Attach drawings to graphically indicate the stockpile locations.

**b. Vehicle and Pedestrian Operations.** While there are many items to be addressed in this major subsection of the CSPP, all are concerned with one main issue: keeping people and vehicles from areas of the airport where they don't belong. This includes preventing unauthorized entry to the AOA and preventing the improper movement of pedestrians or vehicles on the airport. In this section, focus on mechanisms to prevent construction vehicles and workers traveling to and from the worksite from unauthorized entry into movement areas. Specify locations of parking for both employee vehicles and construction equipment, and routes for access and haul roads. In most cases, this will best be accomplished by attaching a drawing. Quote from AC 150/5210-5 specific requirements for contractor vehicles rather than referring to the AC as a whole, and include special requirements for identifying Hazardous Material (HAZMAT) vehicles. Quote from, rather than incorporate by reference, AC 150/5210-20 as appropriate to address the airport's rules for ground vehicle operations, including its training program. Discuss the airport's recordkeeping system listing authorized vehicle operators.

**c. Two-Way Radio Communications.** Include a special section to identify all individuals who are required to maintain communications with Air Traffic (AT) at airports with active towers, or monitor Common Traffic Advisory Frequencies (CTAF) at airports without or with closed ATCT. Include training requirements for all individuals required to communicate with AT. Individuals required to monitor AT frequencies should also be identified. If construction employees are also required to communicate by radio with Airport Operations, this procedure should be described in detail. Usage of vehicle mounted radios and/or portable radios should be addressed. Communication procedures for the event of disabled radio communication (that is, light signals, telephone numbers, others) must be included. All radio frequencies should be identified (Tower, Ground Control, CTAF, UNICOM, ATIS, and so on).

**d. Airport Security.** Address security as it applies to vehicle and pedestrian operations. Discuss TSA requirements, security badging requirements, perimeter fence integrity, gate security, and other needs. Attach drawings to graphically indicate secured and/or Security Identification Display Areas (SIDA), perimeter fencing, and available access points.

**311. Wildlife Management.** Discuss in this section wildlife management procedures. Describe the maintenance of existing wildlife mitigation devices, such as perimeter fences, and procedures to limit wildlife attractants. Include procedures to notify Airport Operations of wildlife encounters. Include a reference to paragraph 310 for security (wildlife) fence integrity maintenance as required.

**312. Foreign Object Debris (FOD) Management.** In this section, discuss methods to control and monitor FOD: worksite housekeeping, ground vehicle tire inspections, runway sweeps, and so on. Include a reference to paragraph 315 for inspection requirements as required.

**313. Hazardous Materials (HAZMAT) Management.** Describe in this section HAZMAT management procedures: fuel deliveries, spill recovery procedures, Material Safety Data Sheet (MSDS) availability, and other considerations. Any specific airport HAZMAT restrictions should also be

identified. Include a reference to paragraph 310 for HAZMAT vehicle identification requirements. Quote from, rather than incorporate by reference, AC 150/5320-15.

**314. Notification of Construction Activities.** List in this section the names and telephone numbers of points of contact for all parties affected by the construction project. We recommend a single list that includes all telephone numbers required under this section. Include emergency notification procedures for all representatives of all parties potentially impacted by the construction. Identify individual representatives – and at least one alternate – for each party. List both on-duty and off-duty contact information for each individual, including individuals responsible for emergency maintenance of airport construction hazard lighting and barricades. Describe procedures to coordinate immediate response to events that might adversely affect the operational safety of the airport (such as interrupted NAVAID service). Explain requirements for and the procedures for the issuance of Notices to Airmen (NOTAMs), notification to FAA required by 14 CFR Part 77 and Part 157 and in the event of affected NAVAIDs. For NOTAMs, identify an individual, and at least one alternate, responsible for issuing and cancelling each specific type of Notice to Airmen (NOTAM) required. Detail notification methods for police, fire fighting, and medical emergencies. This may include 911, but should also include direct phone numbers of local police departments and nearby hospitals. The local Poison Control number should be listed. Procedures regarding notification of Airport Operations and/or the ARFF Department of such emergencies should be identified, as applicable. If airport radio communications are identified as a means of emergency notification, include a reference to paragraph 310. Differentiate between emergency and nonemergency notification of ARFF personnel, the latter including activities that affect ARFF water supplies and access roads. Identify the primary ARFF contact person and at least one alternate. If notification is to be made through Airport Operations, then detail this procedure. Include a method of confirmation from the ARFF department.

**315. Inspection Requirements.** Describe in this section inspection requirements to ensure airfield safety compliance. Include a requirement for routine inspections by the resident engineer (RE) and the construction contractors. If the engineering consultants and/or contractors have a Safety Officer who will conduct such inspections, identify this individual. Describe procedures for special inspections, such as those required to reopen areas for aircraft operations. Part 139 requires daily airfield inspections at certificated airports, but these may need to be more frequent when construction is in progress. Discuss the role of such inspections on areas under construction. Include a requirement to immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

**316. Underground Utilities.** Explain how existing underground utilities will be located and protected. Identify each utility owner and include contact information for each company/agency in the master list. Address emergency response procedures for damaged or disrupted utilities. Include a reference to paragraph 314 above for notification of utility owners of accidental utility disruption as required.

**317. Penalties.** Describe in this section specific penalties imposed for noncompliance with airport rules and regulations, including the CSPP: SIDA violations, Vehicle/Pedestrian Deviations (VPD), and others.

**318. Special Conditions.** Identify any special conditions that may trigger specific safety mitigation actions outlined in this CSPP: low visibility operations, snow removal, aircraft in distress, aircraft accident, security breach, VPD, and other activities requiring construction suspension/resumption. Include a reference to paragraph 310 above for compliance with airport safety and security measures and for radio communications as required. Include a reference to paragraph 319 below for emergency notification of all involved parties, including police/security, ARFF, and medical services.

**319. Runway and Taxiway Visual Aids.** Include marking, lighting, signs, and visual NAVAIDS.

Detail temporary runway and taxiway marking, lighting, signs, and visual NAVAIDs required for the construction. Discuss existing marking, lighting, signs, and visual NAVAIDs that are temporarily, altered, obliterated, or shut down. Consider non-federal facilities and address requirements for reimbursable agreements necessary for alteration of FAA facilities and for necessary flight checks. Identify temporary TORA signs or runway distance remaining signs if appropriate. Identify required temporary visual NAVAIDs such as REIL or PAPI. Quote from, rather than incorporate by reference, AC 150/5340-1, Standards for Airport Markings, AC 150/5340-18, Standards for Airport Sign Systems, and AC 150/5340-30, as required. Attach drawings to graphically indicate proposed marking, lighting, signs, and visual NAVAIDs.

**320. Marking and Signs for Access Routes.** Detail plans for marking and signs for vehicle access routes. To the extent possible, signs should be in conformance with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications, not hand lettered. Detail any modifications to the guidance in the MUTCD necessary to meet frangibility/height requirements.

**321. Hazard Marking and Lighting.** Specify all marking and lighting equipment, including when and where each type of device is to be used. Specify maximum gaps between barricades and the maximum spacing of hazard lighting. Identify one individual and at least one alternate responsible for maintenance of hazard marking and lighting equipment in the master telephone list. Include a reference to paragraph 314 above. Attach drawings to graphically indicate the placement of hazard marking and lighting equipment.

**322. Protection of Runway and Taxiway Safety Areas.** This section should focus exclusively on procedures for protecting all safety areas, including those altered by the construction: methods of demarcation, limit of access, movement within safety areas, stockpiling and trenching restrictions, and so on. Reference AC 150/5300-13: Airport Design as required. Include a reference to paragraph 310 above for procedures regarding vehicle and personnel movement within safety areas. Include a reference to paragraph 310 above for material stockpile restrictions as required. Detail requirements for trenching, excavations, and backfill. Include a reference to paragraph 321 for hazard marking and lighting devices used to identify open excavations as required. If runway and taxiway closures are proposed to protect safety areas, or if temporary displaced thresholds and/or revised declared distances are used to provide adequate Runway Safety Area, include a reference to paragraphs 314 and 319 above. Detail procedures for protecting the runway OFZ, runway OFA, taxiway OFA and runway approach surfaces including those altered by the construction: methods of demarcation, limit of cranes, storage of equipment, and so on. Quote from, rather than incorporate by reference, AC 150/5300-13: Airport Design as required. Include a reference to paragraph 323 for height (i.e. crane) restrictions as required. One way to address the height of equipment that will move during the project is to establish a three-dimensional “box” within which equipment will be confined that can be studied as a single object. Attach drawings to graphically indicate the safety area, OFZ, and OFA boundaries.

**323. Other Limitations on Construction.** This section should describe what limitations must be applied to each area of work and when each limitation will be applied: limitations due to airport operations, height (i.e. crane) restrictions, areas which cannot be worked at simultaneously, day/night work restrictions, winter construction, and other limitations. Include a reference to paragraph 307 above for project phasing requirements based on construction limitations as required.

### Appendix 1. Related Reading Material

Obtain the latest version of the following free publications from the FAA on its Web site at <http://www.faa.gov/airports/>.

AC	Title and Description
AC 150/5200-28	Notices to Airmen (NOTAMs) for Airport Operators
	Guidance for using the NOTAM System in airport reporting.
AC 150/5200-30	Airport Winter Safety and Operations
	Guidance for airport owners/operators on the development of an acceptable airport snow and ice control program and on appropriate field condition reporting procedures.
AC 150/5200-33	Hazardous Wildlife Attractants On or Near Airports
	Guidance on locating certain land uses that might attract hazardous wildlife to public-use airports.
AC 150/5210-5	Painting, Marking, and Lighting of Vehicles Used on an Airport.
	Guidance, specifications, and standards for painting, marking, and lighting vehicles operating in the airport air operations areas.
AC 150/5210-20	Ground Vehicle Operations on Airports
	Guidance to airport operators on developing ground vehicle operation training programs.
AC 150/5300-13	Airport Design
	FAA standards and recommendations for airport design, establishes approach visibility minimums as an airport design parameter, and contains the Object Free area and the obstacle free-zone criteria.
AC 150/5310-24	Airport Foreign Object Debris Management
	Guidance for developing and managing an airport foreign object debris (FOD) program
AC 150/5220-4	Water Supply Systems for Aircraft Fire and Rescue Protection.
	Guidance on selecting a water source and meeting standards for a distribution system to support aircraft rescue and fire fighting service operations on airports.
AC 150/5320-15	Management of Airport Industrial Waste
	Basic information on the characteristics, management, and regulations of industrial wastes generated at airports. Guidance for developing a Storm Water Pollution Prevention Plan (SWPPP) that applies best management practices to eliminate, prevent, or reduce pollutants in storm water runoff with particular airport industrial activities.
AC 150/5340-1	Standards for Airport Markings
	FAA standards for markings used on airport runways, taxiways, and aprons.
AC 150/5340-18	Standards for Airport Sign Systems
	FAA standards for the siting and installation of signs on airport runways and taxiways.
AC 150/5345-28	Precision Approach Path Indicator (PAPI) Systems
	FAA standards for PAPI systems, which provide pilots with visual glide slope guidance during approach for landing.

AC	Title and Description
AC 150/5340-30	Design and Installation Details for Airport Visual Aids
	Guidance and recommendations on the installation of airport visual aids.
AC 150/5345-39	Specification for L-853, Runway and Taxiway Retroreflective Markers
AC 150/5345-44	Specification for Runway and Taxiway Signs
	FAA specifications for unlighted and lighted signs for taxiways and runways.
AC 150/5345-53	Airport Lighting Certification Program
	Details on the Airport Lighting Equipment Certification Program (ALECP).
AC 150/5345-50	Specification for Portable Runway and Taxiway Lights
	FAA standards for portable runway and taxiway lights and runway end identifier lights for temporary use to permit continued aircraft operations while all or part of a runway lighting system is inoperative.
AC 150/5345-55	Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure
AC 150/5370-10	Standards for Specifying Construction of Airports
	Standards for construction of airports, including earthwork, drainage, paving, turfing, lighting, and incidental construction.
FAA Order 5200.11	<a href="#">FAA Airports (ARP) Safety Management System (SMS)</a>
	Basics for implementing SMS within ARP. Includes roles and responsibilities of ARP management and staff as well as other FAA lines of business that contribute to the ARP SMS.
FAA Certalert 98-05	Grasses Attractive to Hazardous Wildlife
	Guidance on grass management and seed selection.
FAA Form 7460-1	<a href="#">Notice of Proposed Construction or Alteration</a>
FAA Form 7480-1	<a href="#">Notice of Landing Area Proposal</a>

Obtain the latest version of the following free publications from the Electronic Code of Federal Regulations at <http://ecfr.gpoaccess.gov/>.

Title 14 CFR Part 139	Certification of Airports
Title 49 CFR Part 1542	Airport Security

Obtain the latest version of the Manual on Uniform Traffic Control Devices from the Federal Highway Administration at <http://mutcd.fhwa.dot.gov/>.

## Appendix 2. Definition of Terms

Term	Definition
7460-1	Notice Of Proposed Construction Or Alteration. For on-airport projects, the form submitted to the FAA regional or airports division office as formal written notification of any kind of construction or alteration of objects that affect navigable airspace, as defined in 14 CFR Part 77, safe, efficient use, and preservation of the navigable airspace. (See guidance available on the FAA web site at <a href="http://oeaaa.faa.gov">oeaaa.faa.gov</a> .) The form may be downloaded at <a href="http://www.faa.gov/airports/resources/forms/">http://www.faa.gov/airports/resources/forms/</a> , or filed electronically at: <a href="https://oeaaa.faa.gov">https://oeaaa.faa.gov</a> .
7480-1	Notice Of Landing Area Proposal. Form submitted to the FAA Airports Regional Division Office or Airports District Office as formal written notification whenever a project without an airport layout plan on file with the FAA involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport The form may be downloaded at <a href="http://www.faa.gov/airports/resources/forms/">http://www.faa.gov/airports/resources/forms/</a> .
AC	Advisory Circular
ACRC	Aircraft Reference Code
ACSI	Airport Certification Safety Inspector
ADG	Airplane Design Group
AIP	Airport Improvement Program
ALECP	Airport Lighting Equipment Certification Program
ANG	Air National Guard
AOA	Air Operations Area. Any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runways, taxiways, or aprons.
ARFF	Aircraft Rescue and Fire Fighting
ARP	FAA Office of Airports
ASDA	Accelerate-Stop Distance Available
ATCT	Airport Traffic Control Tower
ATIS	Automatic Terminal Information Service
ATO	Air Traffic Organization
Certificated Airport	An airport that has been issued an Airport Operating Certificate by the FAA under the authority of 14 CFR Part 139, Certification of Airports.
CFR	Code of Federal Regulations
Construction	The presence and movement of construction-related personnel, equipment, and materials in any location that could infringe upon the movement of aircraft.
CSPP	Construction Safety And Phasing Plan. 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.

Term	Definition
CTAF	Common Traffic Advisory Frequency
Displaced Threshold	A threshold that is located at a point on the runway other than the designated beginning of the runway. The portion of pavement behind a displaced threshold is available for takeoffs in either direction or landing from the opposite direction.
DOT	Department of Transportation
EPA	Environmental Protection Agency
FOD	Foreign Object Debris
HAZMAT	Hazardous Materials
IFR	Instrument Flight Rules
ILS	Instrument Landing System
LDA	Landing Distance Available
LOC	Localizer antenna array
Movement Area	The runways, taxiways, and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading aprons and aircraft parking areas (reference 14 CFR Part 139).
MSDS	Material Safety Data Sheet
MUTCD	Manual on Uniform Traffic Control Devices
NAVAID	Navigation Aid
NAVAID Critical Area	An area of defined shape and size associated with a NAVAID that must remain clear and graded to avoid interference with the electronic signal.
Non-Movement Area	The area inside the airport security fence exclusive of the Movement Area. It is important to note that the non-movement area includes pavement traversed by aircraft.
NOTAM	Notices to Airmen
Obstruction	Any object/obstacle exceeding the obstruction standards specified by 14 CFR Part 77, subpart C.
OE / AAA	Obstruction Evaluation / Airport Airspace Analysis
OFA	Object Free Area. An area on the ground centered on the runway, taxiway, or taxi lane centerline provided to enhance safety of aircraft operations by having the area free of objects except for those objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes. (See AC 150/5300-13, for additional guidance on OFA standards and wingtip clearance criteria.)
OFZ	Obstacle Free Zone. The airspace below 150 ft (45 m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for aircraft landing or taking off from the runway and for missed approaches. The OFZ is subdivided as follows: Runway OFZ, Inner Approach OFZ, Inner Transitional OFZ, and Precision OFZ. Refer to AC 150/5300-13 for guidance on OFZ.
OSHA	Occupational Safety and Health Administration
P&R	Planning and Requirements Group

Term	Definition
PAPI	Precision Approach Path Indicators
PFC	Passenger Facility Charge
PLASI	Pulse Light Approach Slope Indicators
Project Proposal Summary	A clear and concise description of the proposed project or change that is the object of Safety Risk Management.
RE	Resident Engineer
REIL	Runway End Identifier Lights
RNAV	Area Navigation
ROFA	Runway Object Free Area
RSA	Runway Safety Area. A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway, in accordance with AC 150/5300-13.
SIDA	Security Identification Display Area
SMS	Safety Management System
SPCD	Safety Plan Compliance Document. Details developed and submitted by a contractor to the airport operator for approval providing details on how the performance of a construction project will comply with the CSPP.
SRM	Safety Risk Management
Taxiway Safety Area	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway, in accordance with AC 150/5300-13.
TDG	Taxiway Design Group
Temporary	Any condition that is not intended to be permanent.
Temporary Runway End	The beginning of that portion of the runway available for landing and taking off in one direction, and for landing in the other direction. Note the difference from a displaced threshold.
Threshold	The beginning of that portion of the runway available for landing. In some instances, the landing threshold may be displaced.
TODA	Takeoff Distance Available
TOFA	Taxiway Object Free Area
TORA	Takeoff Run Available. The length of the runway less any length of runway unavailable and/or unsuitable for takeoff run computations. See AC 150/5300-13 for guidance on declared distances.
TSA	Taxiway Safety Area Transportation Security Administration
UNICOM	A radio communications system of a type used at small airports.
VASI	Visual Approach Slope Indicators

<b>Term</b>	<b>Definition</b>
VGSI	Visual Glide Slope Indicator. A device that provides a visual glide slope indicator to landing pilots. These systems include precision approach path indicators (PAPI), visual approach slope indicators (VASI), and pulse light approach slope indicators (PLASI).
VFR	Visual Flight Rules
VOR	VHF Omnidirectional Radio Range
VPD	Vehicle / Pedestrian Deviation

### Appendix 3. Safety and Phasing Plan Checklist

This appendix is keyed to Section 2. Plan Requirements. In the electronic version of this AC, clicking on the paragraph designation in the Reference column will access the applicable paragraph. There may be instances where the CSPP requires provisions that are not covered by the list in this appendix.

This checklist is intended as an aid, not as a required submittal.

Coordination	Reference	Addressed			Remarks
<b>General Considerations</b>					
Requirements for predesign, prebid, and preconstruction conferences to introduce the subject of airport operational safety during construction are specified.	205	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Operational safety is a standing agenda item for construction progress meetings.	205	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Scheduling of the construction phases is properly addressed.	206	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Areas and Operations Affected by Construction Activity</b>					
Drawings showing affected areas are included.	207.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Closed or partially closed runways, taxiways, and aprons are depicted on drawings.	207.a(1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Access routes used by ARFF vehicles affected by the project are addressed.	207.a(2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Access routes used by airport and airline support vehicles affected by the project are addressed.	207.a(3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Underground utilities, including water supplies for fire fighting and drainage.	207.a(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Approach/departure surfaces affected by heights of temporary objects are addressed.	207.a(5)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Construction areas, storage areas, and access routes near runways, taxiways, aprons, or helipads are properly depicted on drawings.	207.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Temporary changes to taxi operations are addressed.	207.b(1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

Coordination	Reference	Addressed			Remarks
Detours for ARFF and other airport vehicles are identified.	207.b(2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Maintenance of essential utilities and underground infrastructure is addressed.	207.b(3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Temporary changes to air traffic control procedures are addressed.	207.b(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>NAVAIDS</b>					
Critical areas for NAVAIDS are depicted on drawings.	208	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Effects of construction activity on the performance of NAVAIDS, including unanticipated power outages, are addressed.	208	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Protection of NAVAID facilities is addressed.	208	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The required distance and direction from each NAVAID to any construction activity is depicted on drawings.	208	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Procedures for coordination with FAA ATO/Technical Operations, including identification of points of contact, are included.	208, 213.a, 213.e(3)(a), 218.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Contractor Access</b>					
The CSPP addresses areas to which contractor will have access and how the areas will be accessed.	209	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The application of 49 CFR Part 1542 Airport Security, where appropriate, is addressed.	209	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The location of stockpiled construction materials is depicted on drawings.	209.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The requirement for stockpiles in the ROFA to be approved by FAA is included.	209.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Requirements for proper stockpiling of materials are included.	209.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

Coordination	Reference	Addressed			Remarks
Construction site parking is addressed.	209.b(1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Construction equipment parking is addressed.	209.b(2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Access and haul roads are addressed.	209.b(3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
A requirement for marking and lighting of vehicles to comply with AC 150/5210-5, Painting, Marking and Lighting of Vehicles Used on an Airport, is included.	209.b(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Proper vehicle operations, including requirements for escorts, are described.	209.b(5), 209.b(6)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Training requirements for vehicle drivers are addressed.	209.b(7)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Two-way radio communications procedures are described.	209.b(9)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Maintenance of the secured area of the airport is addressed.	209.b(10)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Wildlife Management</b>					
The airport operator's wildlife management procedures are addressed.	210	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Foreign Object Debris Management</b>					
The airport operator's FOD management procedures are addressed.	211	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Hazardous Materials Management</b>					
The airport operator's hazardous materials management procedures are addressed.	212	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Notification of Construction Activities</b>					
Procedures for the immediate notification of airport user and local FAA of any conditions adversely affecting the operational safety of the airport are detailed.	213	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

Coordination	Reference	Addressed			Remarks
Maintenance of a list by the airport operator of the responsible representatives/points of contact for all involved parties and procedures for contacting them 24 hours a day, seven days a week is specified.	213.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
A list of local ATO/Technical Operations personnel is included.	213.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
A list of ATCT managers on duty is included.	213.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
A list of authorized representatives to the OCC is included.	213.b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Procedures for coordinating, issuing, maintaining and cancelling by the airport operator of NOTAMS about airport conditions resulting from construction are included.	208, 213.b, 218.b(4)(i)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Provision of information on closed or hazardous conditions on airport movement areas by the airport operator to the OCC is specified.	213.b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Emergency notification procedures for medical, fire fighting, and police response are addressed.	213.c	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Coordination with ARFF personnel for non-emergency issues is addressed.	213.d	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Notification to the FAA under 14 CFR parts 77 and 157 is addressed.	213.e	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Reimbursable agreements for flight checks and/or design and construction for FAA owned NAVAIDs are addressed.	213.e(3)(b)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Inspection Requirements</b>					
Daily inspections by both the airport operator and contractor are specified.	214.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Final inspections at certificated airports are specified when required.	214.b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Underground Utilities</b>					
Procedures for protecting existing underground facilities in excavation areas are described.	215	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

Coordination	Reference	Addressed			Remarks
<b>Penalties</b>					
Penalty provisions for noncompliance with airport rules and regulations and the safety plans are detailed.	216	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Special Conditions</b>					
Any special conditions that affect the operation of the airport or require the activation of any special procedures are addressed.	217	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Runway and Taxiway Visual Aids - Marking, Lighting, Signs, and Visual NAVAIDs</b>					
The proper securing of temporary airport markings, lighting, signs, and visual NAVAIDs is addressed.	218.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Frangibility of airport markings, lighting, signs, and visual NAVAIDs is specified.	218.a, 218.c, 219, 220.b(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The requirement for markings to be in compliance with AC 150/5340-1, Standards for Airport Markings is specified.	218.b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The requirement for lighting to conform to AC 150/5340-30, Design and Installation Details for Airport Visual Aids, AC 150/5345-50, Specification for Portable Runway and Taxiway Lights , and AC 150/5345-53 Airport Lighting Certification Program, is specified.	218.b(1)(f)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The use of a lighted X is specified where appropriate.	218.b(1)(b), 218.b(3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The requirement for signs to conform to AC 150/5345-44, Specification for Runway and Taxiway Signs, AC 50/5340-18, Standards for Airport Sign Systems, and AC 150/5345-53, Airport Lighting Certification Program, is specified.	218.c	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Marking and Signs For Access Routes</b>					
The CSPP specifies that pavement markings and signs intended for construction personnel should conform to AC 150/5340-18 and, to the extent practicable, with the MUTCD and/or State highway specifications.	219	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Hazard Marking and Lighting</b>					
Prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles are specified.	220.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

Coordination	Reference	Addressed			Remarks
Hazard marking and lighting are specified to identify open manholes, small areas under repair, stockpiled material, and waste areas.	220.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP considers less obvious construction-related hazards.	220.a	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast is specified.	220.b(1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The spacing of barricades is specified such that a breach is physically prevented barring a deliberate act.	220.b(1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Red lights meeting the luminance requirements of the State Highway Department are specified.	220.b(2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Barricades, temporary markers, and other objects placed and left in areas adjacent to any open runway, taxiway, taxi lane, or apron are specified to be as low as possible to the ground, and no more than 18 in high.	220.b(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Barricades marked with diagonal, alternating orange and white stripes are specified to indicate construction locations in which no part of an aircraft may enter.	220.b(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Highly reflective barriers with lights are specified to barricade taxiways leading to closed runways.	220.b(5)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Markings for temporary closures are specified.	220.b(5)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The provision of a contractor's representative on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades is specified.	220.b(7)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Protection of Runway and Taxiway Safety Areas</b>					
The CSPP clearly states that no construction may occur within a safety area while the associated runway or taxiway is open for aircraft operations.	221.a(1), 221.c(1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP specifies that the airport operator coordinates the adjustment of RSA or TSA dimensions with the ATCT and the appropriate FAA Airports Regional or District Office and issues a local NOTAM.	221.a(2), 221.c(2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

Coordination	Reference	Addressed			Remarks
Procedures for ensuring adequate distance for protection from blasting operations, if required by operational considerations, are detailed.	221.c(3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP specifies that open trenches or excavations are not permitted within a safety area while the associated runway or taxiway is open.	221.a(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Appropriate covering of excavations in the RSA or TSA that cannot be backfilled before the associated runway or taxiway is open is detailed.	221.a(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP includes provisions for prominent marking of open trenches and excavations at the construction site.	221.a(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Grading and soil erosion control to maintain RSA/TSA standards are addressed.	221.c(5)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP specifies that equipment is to be removed from the ROFA when not in use.	221.b	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP clearly states that no construction may occur within a taxiway safety area while the taxiway is open for aircraft operations.	221.c	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Appropriate details are specified for any construction work to be accomplished in a taxiway object free area.	221.d	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Measures to ensure that personnel, material, and/or equipment do not penetrate the OFZ or threshold siting surfaces while the runway is open for aircraft operations are included.	221.e	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
Provisions for protection of runway approach/departure areas and clearways are included.	221.f	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
<b>Other Limitations on Construction</b>					
The CSPP prohibits the use of open flame welding or torches unless adequate fire safety precautions are provided and the airport operator has approved their use.	222.a(2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP prohibits the use of flare pots within the AOA at any time.	222.a(4)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	
The CSPP prohibits the use of electrical blasting caps on or within 1,000 ft (300 m) of the airport property.	222.a(3)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	

#### Appendix 4. Construction Project Daily Safety Inspection Checklist

The situations identified below are potentially hazardous conditions that may occur during airport construction projects. Safety area encroachments, unauthorized and improper ground vehicle operations, and unmarked or uncovered holes and trenches near aircraft operating surfaces pose the most prevalent threats to airport operational safety during airport construction projects. The list below is one tool that the airport operator or contractor may use to aid in identifying and correcting potentially hazardous conditions. It should be customized as appropriate for each project.

#### Potentially Hazardous Conditions

Item	Action Required	or	None
Excavation adjacent to runways, taxiways, and aprons improperly backfilled.			<input type="checkbox"/>
Mounds of earth, construction materials, temporary structures, and other obstacles near any open runway, taxiway, or taxi lane; in the related Object Free area and aircraft approach or departure areas/zones; or obstructing any sign or marking.			<input type="checkbox"/>
Runway resurfacing projects resulting in lips exceeding 3 in (7.6 cm) from pavement edges and ends.			<input type="checkbox"/>
Heavy equipment (stationary or mobile) operating or idle near AOA, in runway approaches and departures areas, or in OFZ.			<input type="checkbox"/>
Equipment or material near NAVAIDs that may degrade or impair radiated signals and/or the monitoring of navigation and visual aids. Unauthorized or improper vehicle operations in localizer or glide slope critical areas, resulting in electronic interference and/or facility shutdown.			<input type="checkbox"/>
Tall and especially relatively low visibility units (that is, equipment with slim profiles) — cranes, drills, and similar objects — located in critical areas, such as OFZ and approach zones.			<input type="checkbox"/>
Improperly positioned or malfunctioning lights or unlighted airport hazards, such as holes or excavations, on any apron, open taxiway, or open taxi lane or in a related safety, approach, or departure area.			<input type="checkbox"/>
Obstacles, loose pavement, trash, and other debris on or near AOA. Construction debris (gravel, sand, mud, paving materials) on airport pavements may result in aircraft propeller, turbine engine, or tire damage. Also, loose materials may blow about, potentially causing personal injury or equipment damage.			<input type="checkbox"/>

Item	Action Required	or	None
Inappropriate or poorly maintained fencing during construction intended to deter human and animal intrusions into the AOA. Fencing and other markings that are inadequate to separate construction areas from open AOA create aviation hazards.			<input type="checkbox"/>
Improper or inadequate marking or lighting of runways (especially thresholds that have been displaced or runways that have been closed) and taxiways that could cause pilot confusion and provide a potential for a runway incursion. Inadequate or improper methods of marking, barricading, and lighting of temporarily closed portions of AOA create aviation hazards.			<input type="checkbox"/>
Wildlife attractants — such as trash (food scraps not collected from construction personnel activity), grass seeds, tall grass, or standing water — on or near airports.			<input type="checkbox"/>
Obliterated or faded temporary markings on active operational areas.			<input type="checkbox"/>
Misleading or malfunctioning obstruction lights. Unlighted or unmarked obstructions in the approach to any open runway pose aviation hazards.			<input type="checkbox"/>
Failure to issue, update, or cancel NOTAMs about airport or runway closures or other construction related airport conditions.			<input type="checkbox"/>
Failure to mark and identify utilities or power cables. Damage to utilities and power cables during construction activity can result in the loss of runway / taxiway lighting; loss of navigation, visual, or approach aids; disruption of weather reporting services; and/or loss of communications.			<input type="checkbox"/>
Restrictions on ARFF access from fire stations to the runway / taxiway system or airport buildings.			<input type="checkbox"/>
Lack of radio communications with construction vehicles in airport movement areas.			<input type="checkbox"/>
Objects, regardless of whether they are marked or flagged, or activities anywhere on or near an airport that could be distracting, confusing, or alarming to pilots during aircraft operations.			<input type="checkbox"/>
Water, snow, dirt, debris, or other contaminants that temporarily obscure or derogate the visibility of runway/taxiway marking, lighting, and pavement edges. Any condition or factor that obscures or diminishes the visibility of areas under construction.			<input type="checkbox"/>
Spillage from vehicles (gasoline, diesel fuel, oil) on active pavement areas, such as runways, taxiways, aprons, and airport roadways.			<input type="checkbox"/>

Item	Action Required	or	None
Failure to maintain drainage system integrity during construction (for example, no temporary drainage provided when working on a drainage system).			<input type="checkbox"/>
Failure to provide for proper electrical lockout and tagging procedures. At larger airports with multiple maintenance shifts/workers, construction contractors should make provisions for coordinating work on circuits.			<input type="checkbox"/>
Failure to control dust. Consider limiting the amount of area from which the contractor is allowed to strip turf.			<input type="checkbox"/>
Exposed wiring that creates an electrocution or fire ignition hazard. Identify and secure wiring, and place it in conduit or bury it.			<input type="checkbox"/>
Site burning, which can cause possible obscuration.			<input type="checkbox"/>
Construction work taking place outside of designated work areas and out of phase.			<input type="checkbox"/>

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