

# 16A

Letting April 28, 2023

## Notice to Bidders, Specifications and Proposal

**WARNING: FAA Buy American Preference provisions apply to this contract. Failure to submit a "Certification of Compliance with FAA Buy American Preference – Construction Projects" form in accordance with the bidding procedures set forth herein (Appendix A4) will result in the bid being declared non-responsive.**



**Illinois Department  
of Transportation**

**Springfield, Illinois 62764**

**Contract No. GR012  
Greenville Airport  
Greenville, Illinois  
Bond County  
Illinois Project No. GRE-4879  
SBG Project No. 3-17-SBGP-162/171/184**



## NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on April 28, 2023, at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. GR012  
Greenville Airport  
Greenville, Illinois  
Bond County  
Illinois Project No. GRE-4879  
SBG Project No. 3-17-SBGP-162/171/184**

**Replace existing weather observation equipment with AWOS-II equipment**

**For engineering information, please contact Eric Boe, P.E. of Brown & Roberts, Inc. at 618.252.8111.**

### **3. INSTRUCTIONS TO BIDDERS.**

- (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-23 of the Standard Specifications for Construction of Airports (Adopted September 25, 2020 & Revised November 12, 2021), become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
- (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded within 90 calendar days to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

- 5. PRE-BID CONFERENCE.** N/A

- 6. DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 9.0%.

- 7. SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Standard Specifications for Construction of Airports (Adopted September 25, 2020 & Revised November 12, 2021), the Special Provisions dated March 3, 2023, and the Construction Plans dated March 3, 2023 as approved by the Illinois Department of Transportation, Division of Aeronautics.

**8. BIDDING REQUIREMENTS AND BASIS OF AWARD.** When alternates are included in the proposal, the following shall apply:

a. Additive Alternates

(1) Bidders must submit a bid for the Base Bid and for all Additive Alternates.

(2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

The lowest aggregate amount of (i) the Base Bid plus (ii) any Additive Alternate(s) which the Department elects to award based on the availability of funding.

Award of this contract will be limited to the following bid alternate combinations:

- I. Base Bid
- II. Base Bid + Additive Alternate 1
- III. Base Bid + Additive Alternate 1 + Additive Alternate 2
- IV. Base Bid + Additive Alternate 1 + Additive Alternate 2 + Additive Alternate 3

The Department may elect not to award any Additive Alternates. In that case, award will be to the lowest responsible qualified bidder of the Base Bid.

b. Optional Alternates

(1) Bidders must submit a bid for the Base Bid and for either Alternate A or Alternate B or for both Alternate A and Alternate B.

(2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

The lower of the aggregate of either (i) the Base Bid plus Alternate A or (ii) the Base Bid plus Alternate B.

**9. CONTRACT TIME.** The Contractor shall complete all work within the specified contract time. Any calendar day extension beyond the specified contract time must be fully justified, requested by the Contractor in writing, and approved by the Engineer, or be subject to liquidated damages.

The contract time for this contract is 30 calendar days.

**10. INDEPENDENT WEIGHT CHECKS.** The Department reserves the right to conduct random unannounced independent weight checks on any delivery for bituminous, aggregate or other pay item for which the method of measurement for payment is based on weight. The weight checks will be accomplished by selecting, at random, a loaded truck and obtaining a loaded and empty weight on an independent scale. In addition, the department may perform random weight checks by obtaining loaded and empty truck weights on portable scales operated by department personnel.

**11. MATERIAL COST ADJUSTMENTS.** Federal Aviation Administration rules prohibit the use of escalation clauses for materials. Therefore, the Illinois Department of Transportation, Division of Aeronautics cannot offer any material cost adjustment provisions for projects that utilize Federal Funds.

**12. GOOD FAITH COMPLIANCE.** The Illinois Department of Transportation has made a good faith effort to include all statements, requirements, and other language required by federal and state law and by various offices within federal and state governments whether that language is required by law or not. If anything of this nature has been left out or if additional language etc. is later required, the bidder/contractor shall cooperate fully with the Department to modify the contract or bid documents to correct the deficiency. If the change results in increased operational costs, the Department shall reimburse the contractor for such costs as it may find to be reasonable.

By Order of the  
Illinois Department of Transportation

Omer Osman,  
Secretary

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DIVISION OF AERONAUTICS

**REQUIRED CONTRACT PROVISIONS FOR STATE FUNDED AIRPORT CONSTRUCTION PROJECTS**

The following provisions are State of Illinois requirements and are in addition to the REQUIRED CONTRACT PROVISIONS FOR AIRPORT IMPROVEMENT PROGRAM AND FOR OBLIGATED SPONSORS

**DISADVANTAGED BUSINESS POLICY**

NOTICE: This proposal contains the special provision entitled "Disadvantaged Business Participation." Inclusion of this Special Provision in this contract satisfies the obligations of the Department of Transportation under federal law as implemented by 49 CFR 23 and under the Illinois "Minority and Female Business Enterprise Act."

POLICY: It is public policy that the businesses defined in 49 CFR Part 23 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with State or Federal funds. Consequently, the requirements of 49 CFR Part 23 apply to this contract.

OBLIGATION: The Contractor agrees to ensure that the businesses defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of this contract. In this regard, the Contractor shall take all necessary and reasonable steps, in accordance with 49 CFR Part 23, to ensure that the said businesses have the maximum opportunity to compete for and perform portions of this contract. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

The Contractor shall include the above Policy and Obligation statements of this Special Provision in every subcontract, including procurement of materials and leases of equipment.

DBE/WBE CONTRACTOR FINANCE PROGRAM: On contracts where a loan has been obtained through the DBE/WBE Contractor Finance Program, the Contractor shall cooperate with the Department by making all payments due to the DBE/WBE Contractor by means of a two-payee check payable to the Lender (Bank) and the Borrower (DBE/WBE Contractor).

BREACH OF CONTRACT: Failure to carry out the requirements set forth above and in the Special Provision shall constitute a breach of contract and may result in termination of the contract or liquidated damages as provided in the special provision.

**SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

**Effective: September 1, 2000**

**Revised: March 2, 2019**

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

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

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 9.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:  
<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate and adequately document enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere *pro forma* efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "[DOT.DBE.UP@illinois.gov](mailto:DOT.DBE.UP@illinois.gov)" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

**CALCULATING DBE PARTICIPATION.** The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

(a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

(b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

(c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

(d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.

(e) DBE as a material supplier:

(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

(2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.

(3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

(a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at [DOT.DBEP@illinois.gov](mailto:DOT.DBEP@illinois.gov).

(b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(c) SUBCONTRACT. The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.

(d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

(1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

(2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

(3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

(f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily



completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

(g) **ENFORCEMENT.** The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(h) **RECONSIDERATION.** Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

**SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)**

**Effective: June 2, 2012**

**Revised: November 1, 2021**

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Resident Engineer on Division of Aeronautics Form "AER 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

**SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

**Effective: November 2, 2017**

**Revised: April 1, 2019**

To account for the preparatory work and the operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting according to Section 80-01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form AER 260A submitted for the approval of the subcontractor's work.

Value of Subcontract Reported on Form AER 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%

The mobilization payment to the subcontractor is an advance payment of the reported amount of the subcontract and is not a payment in addition to the amount of the subcontract; therefore, the amount of the advance payment will be deducted from future progress payments.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

**SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS**

**Effective: November 2, 2017**

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 90-07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause. If reasonable cause is asserted, written notice shall be provided to the applicable subcontractor and/or material supplier and the Engineer within five days of the Contractor receiving payment. The written notice shall identify the contract number, the subcontract or material purchase agreement, a detailed reason for refusal, the value of payment being withheld, and the specific remedial actions required of the subcontractor and/or material supplier so that payment can be made.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

#### **SPECIAL PROVISION FOR SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)**

**Effective: April 2, 2018**

##### Subcontractor and Disadvantaged Business Enterprise Payment Reporting

The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

The report shall be made through the Department's on-line subcontractor payment reporting system within 21 days of making the payment.

#### **SPECIAL PROVISION FOR ADDITIONAL STATE REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION CONTRACTS**

**Effective: February 1, 1969**

**Revised: January 1, 2017**

#### **EQUAL EMPLOYMENT OPPORTUNITY**

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

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

- (1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability

unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

(2) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (in accordance with the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

(3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.

(4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

(5) That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

(6) That it will permit access to all relevant books, records, accounts, and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

(7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

#### **SPECIAL PROVISION FOR SUBMISSION OF PAYROLL RECORDS (BDE)**

**Effective: April 1, 2021**

**Revised: November 1, 2022**

#### **STATEMENTS AND PAYROLLS**

The payroll records shall include the worker's name, the worker's address, the worker's telephone number when available, the worker's social security number, the worker's classification or classifications, the worker's gross and net wages paid in each pay period, the worker's number of hours worked each day, and the worker's starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable.

The Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPTracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected.

#### **SPECIAL PROVISION FOR NPDES CERTIFICATION**

In accordance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder, this certification is required for all construction contracts that will result in the disturbance of one or more acres total land area.

The bidder certifies under penalty of law that he/she understands the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR100000) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

The Airport Owner or its Agent will:

- 1) prepare, sign and submit the Notice of Intent (NOI)
- 2) conduct site inspections and complete and file the inspection reports
- 3) submit Incidence of Non-Compliance (ION) forms
- 4) submit Notice of Termination (NOT) form

Prior to the issuance of the Notice-to-Proceed, for each erosion control measure identified in the Storm Water Pollution Prevention Plan, the contractor or subcontractor responsible for the control measure(s) must sign the above certification (forms to be provided by the Department).

#### **SPECIAL PROVISION FOR COMPLETION TIME VIA CALENDAR DAYS**

It being understood and agreed that the completion within the time limit is an essential part of the contract, the bidder agrees to complete the work within 30 calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

#### **ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)**

**Effective: June 2, 2021**

**Revised: September 2, 2021**

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

State of Illinois  
Department of Transportation

SPECIAL PROVISION  
FOR  
SECTION 80 PROSECUTION AND PROGRESS

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports (Adopted September 25, 2020 & Revised November 12, 2021) and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

80-09 Failure to complete on time.

ADD:

Schedule of Deductions for Each Day of Overrun in Contract Time			
Original Contract Amount		Daily Charges	
From More Than	To and Including	Calendar Day	Work Day
\$ 0	\$ 100,000	\$ 475	\$ 675
100,000	500,000	750	1,050
500,000	1,000,000	1,025	1,425
1,000,000	3,000,000	1,275	1,725
3,000,000	6,000,000	1,425	2,000
6,000,000	12,000,000	2,300	3,450
12,000,000	And over	6,775	9,525

State of Illinois  
Department of Transportation

SPECIAL PROVISION  
FOR  
SECTION 90 MEASUREMENT AND PAYMENT

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports (Adopted September 25, 2020 & Revised November 12, 2021) and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

90-07 Partial payments.

DELETE: The entire section.

ADD: Partial payments will be made to the Contractor at least once each month as the work progresses. The payments will be based upon estimates, prepared by the Resident 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 Section 90-08 PAYMENT FOR MATERIALS ON HAND. From the amount of partial payment so determined on Federal-Aid projects, there shall be deducted an amount up to ten percent of the cost of the completed work which shall be retained until all conditions necessary for financial closeout of the project are satisfied. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1,000.00 will be approved for payment other than the final payment. A final voucher for under \$5.00 shall not be paid except through electronic funds transfer. (15 ILCS 405/9(b-1))

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, 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 Department 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 Section 90-09 ACCEPTANCE AND FINAL PAYMENT.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610) progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

In accordance with 49 USC § 47111, the Department will not make payments totaling more than 90 percent of the contract until all conditions necessary for financial closeout of the project are satisfied.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.

90-09 Trust agreement option.

DELETE: The entire section.

# APPENDIX A – FEDERAL AVIATION ADMINISTRATION (FAA) REQUIRED CONTRACT PROVISIONS

## A1 ACCESS TO RECORDS AND REPORTS

### A1.1 CONTRACT CLAUSE

#### ACCESS TO RECORDS AND REPORTS

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

## A2 AFFIRMATIVE ACTION REQUIREMENTS

### A2.1 SOLICITATION CLAUSE

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

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

#### Timetables

The following goal for female utilization in each construction craft and trade shall apply to all Contractors holding Federal and federally-assisted construction contracts and subcontracts in excess of \$10,000. The goal is applicable to the Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or nonfederally related construction contract or subcontract.

#### AREA COVERED (STATEWIDE)

Goals for Women apply nationwide.

	GOAL
	Goal (percent)
Female Utilization.....	6.9

Until further notice, the following goals for minority utilization in each construction craft and trade shall apply to all Contractors holding Federal and federally-assisted construction contracts and subcontracts in excess of \$10,000 to be performed in the respective geographical areas. The goals are applicable to the Contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally-assisted or nonfederally related construction contract or subcontract.

<u>Economic Area (percent)</u>	Goal
056 Paducah, KY: Non-SMSA Counties - IL - Hardin, Massac, Pope KY - Ballard, Caldwell, Calloway, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, McCracken, Marshall	5.2
080 Evansville, IN: Non-SMSA Counties - IL - Edwards, Gallatin, Hamilton, Lawrence, Saline, Wabash, White IN - Dubois, Knox, Perry, Pike, Spencer KY - Hancock, Hopkins, McLean, Mublenberg, Ohio, Union, Webster	3.5
081 Terre Haute, IN: Non-SMSA Counties - IL - Clark, Crawford IN - Parke	2.5
083 Chicago, IL: SMSA Counties: 1600 Chicago, IL - IL - Cook, DuPage, Kane, Lake, McHenry, Will	19.6

3740 Kankakee, IL - IL - Kankakee	9.1
Non-SMSA Counties IL - Bureau, DeKalb, Grundy, Iroquois, Kendall, LaSalle, Livingston, Putnam IN - Jasper, Laporte, Newton, Pulaski, Starke	18.4
084 Champaign - Urbana, IL: SMSA Counties: 1400 Champaign - Urbana - Rantoul, IL - IL - Champaign	7.8
Non-SMSA Counties - IL - Coles, Cumberland, Douglas, Edgar, Ford, Piatt, Vermilion	4.8
085 Springfield - Decatur, IL: SMSA Counties: 2040 Decatur, IL - IL - Macon	7.6
7880 Springfield, IL - IL - Menard, Sangamon	4.5
Non-SMSA Counties IL - Cass, Christian, Dewitt, Logan, Morgan, Moultrie, Scott, Shelby	4.0
086 Quincy, IL: Non-SMSA Counties	3.1
IL - Adams, Brown, Pike MO - Lewis, Marion, Pike, Ralls	
087 Peoria, IL: SMSA Counties: 1040 Bloomington - Normal, IL - IL - McLean	2.5
6120 Peoria, IL - IL - Peoria, Tazewell, Woodford	4.4
Non-SMSA Counties - IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren	3.3
088 Rockford, IL: SMSA Counties: 6880 Rockford, IL - IL - Boone, Winnebago	6.3
Non-SMSA Counties - IL - Lee, Ogle, Stephenson	4.6
098 Dubuque, IA: Non-SMSA Counties - IL - JoDaviess IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik WI - Crawford, Grant, Lafayette	0.5
099 Davenport, Rock Island, Moline, IA - IL: SMSA Counties: 1960 Davenport, Rock Island, Moline, IA - IL - IL - Henry, Rock Island IA - Scott	4.6
Non-SMSA Counties - IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine MO - Clark	3.4
107 St. Louis, MO: SMSA Counties: 7040 St. Louis, MO - IL - IL - Clinton, Madison, Monroe, St. Clair MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City	14.7
Non-SMSA Counties - IL - Alexander, Bond, Calhoun, Clay, Effingham, Fayette, Franklin, Greene,	11.4



Jackson, Jasper, Jefferson, Jersey, Johnson, Macoupin, Marion, Montgomery, Perry, Pulaski, Randolph, Richland, Union, Washington, Wayne, Williamson  
MO - Bollinger, Butler, Cape Girardeau, Carter, Crawford, Dent, Gasconade, Iron, Lincoln, Madison, Maries, Mississippi, Montgomery, Perry, Phelps, Reynolds, Ripley, St. Francois, St. Genevieve, Scott, Stoddard, Warren, Washington, Wayne

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

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

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

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is Greenville, Illinois; Bond County.

### **A3 BREACH OF CONTRACT TERMS**

#### **A3.1 CONTRACT CLAUSE**

This provision is required for all contracts that exceed the simplified acquisition threshold as stated in 2 CFR Part 200, Appendix II (A). This threshold is occasionally adjusted for inflation and is \$250,000.

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

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

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

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

### **A4 BUY AMERICAN PREFERENCE**

#### **A4.1 SOLICITATION CLAUSES**

##### **A4.1.1 Certification of Compliance with FAA Buy American Preference Statement**

#### **FAA BUY AMERICAN PREFERENCE**

The Contractor certifies that its bid/offer is in compliance with 49 USC § 50101, BABA and other related Made in America Laws<sup>1</sup>, U.S. statutes, guidance, and FAA policies, which provide that Federal funds may not be obligated unless all iron, steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

**The bidder or offeror must complete and submit the certification of compliance with FAA's Buy American Preference, BABA and Made in America laws included herein with their bid or offer. The Illinois Department of Transportation, Division of Aeronautics will reject as nonresponsive any bid or offer that does not include a completed certification of compliance with FAA's Buy American Preference and BABA.**

The bidder or offeror certifies that all constructions materials, defined to mean an article, material, or supply other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall used in the project are manufactured in the U.S.

<sup>1</sup>Per Executive Order 14005 "Made in America Laws" means all statutes, regulations, rules, and Executive Orders relating to federal financial assistance awards or federal procurement, including those that refer to "Buy America" or "Buy American," that require, or provide a preference for, the purchase or acquisition of goods, products, or materials produced in the United States, including iron, steel, and manufactured products offered in the United States.

**A4.1.2 Illinois Department of Transportation, Division of Aeronautics Requirements**

**The bidder shall submit the completed and signed “Certification of Compliance with FAA Buy American Preference – Construction Projects” form with the bid. The required form must be submitted as a single .pdf file using the “Integrated Contractor Exchange (iCX)” application within the Department’s “EBids System”.**

**The Department will not accept a “Certification of Compliance with FAA Buy American Preference – Construction Projects” form if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder’s proposal guaranty and may deny authorization to bid the project if re-advertised for bids.**

Any and all steel products used in the performance of this contract by the Contractor, subcontractors, producers, and suppliers are required to adhere to the Illinois Steel Products Procurement Act (30 ILCS 565/), which requires that all steel items be of 100 percent domestic origin and manufacture. Any products listed under the Federal Aviation Administration’s (FAA) nationwide approved list of “Equipment Meeting Buy American Requirements” shall be deemed as meeting the requirements of the Illinois Steel Products Procurement Act.

All FAA Buy American Waivers are the responsibility of the Contractor, must be obtained prior to the Notice to Proceed, and must be submitted to the Illinois Department of Transportation, Division of Aeronautics for review and approval before being forwarded to the FAA. Any products used on the project that cannot meet the domestic requirement, and for which a waiver prior to the Notice to Proceed was not obtained, will be rejected for use and subject to removal and replacement with no additional compensation, and the contractor deemed non-responsive.

#### A4.1.3 Certification of Compliance with FAA Buy American Preference – Construction Projects

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101, BABA and other related Made in America Laws, U.S. statutes, guidance, and FAA policies, by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e., not both) by inserting a checkmark (✓) or the letter “X”.

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA and other related U.S. statutes, guidance, and policies of the FAA by:
- a) Only installing iron, steel and manufactured products produced in the United States;
  - b) Only installing construction materials defined as: an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber or drywall that have been manufactured in the United States.
  - c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
  - d) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

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

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

#### Required Documentation

**Type 2 Waiver (Nonavailability)** - The iron, steel, manufactured goods or construction materials or manufactured goods are not available in sufficient quantity or quality in the United States. The required documentation for the Nonavailability waiver is

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire

- b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;
- c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

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

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

**Type 4 Waiver (Unreasonable Costs)** - Applying this provision for iron, steel, manufactured goods or construction materials would increase the cost of the overall project by more than 25 percent. The required documentation for this waiver is:

- a) A completed Content Percentage Worksheet and Final Assembly Questionnaire from
- b) At minimum two comparable equal bids and/or offers;
- c) Receipt or record that demonstrates that supplier scouting called for in Executive Order 14005, indicates that no domestic source exists for the project and/or component;
- d) Completed waiver applications for each comparable bid and/or offer.

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

\_\_\_\_\_   
 Date

\_\_\_\_\_   
 Signature

\_\_\_\_\_   
 Company Name

\_\_\_\_\_   
 Title

## **A5 CIVIL RIGHTS - GENERAL**

### **A5.1 CONTRACT CLAUSES**

#### **A5.1.1 General Clause that is used for Contracts, Lease Agreements, and Transfer Agreements**

##### **GENERAL CIVIL RIGHTS PROVISIONS**

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

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

#### **A5.1.2 Specific Clause that is used for General Contract Agreements**

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

## **A6 CIVIL RIGHTS – TITLE VI ASSURANCE**

### **A6.1 CONTRACT CLAUSE**

#### **A6.1.1 Title VI Solicitation Notice**

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

The Illinois Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

#### **A6.1.2 Title VI List of Pertinent Nondiscrimination Acts and Authorities**

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

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

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, *et seq.*) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs [70 Fed. Reg. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, *et seq.*)

**A6.1.3 Nondiscrimination Requirements/Title VI Clauses for Compliance**

**Compliance with Nondiscrimination Requirements:**

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

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

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

**A7 CLEAN AIR AND WATER POLLUTION CONTROL**

**A7.1 CONTRACT CLAUSE**

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

**CLEAN AIR AND WATER POLLUTION CONTROL**

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC §§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 USC §§ 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

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

**A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS**

**A8.1 CONTRACT CLAUSE**

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

**CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS**

1. Overtime Requirements.

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

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

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with

respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

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

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

### 4. Subcontractors.

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

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

### **A9.1 CONTRACT CLAUSE**

#### **COPELAND "ANTI-KICKBACK" ACT**

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

## **A10 DAVIS-BACON REQUIREMENTS**

### **A10.1 CONTRACT CLAUSE**

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

##### 1. Minimum Wages.

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

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

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

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

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

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

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

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

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

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

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

### 3. Payrolls and Basic Records.

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

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR § 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

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

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

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

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

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



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

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

#### 4. Apprentices and Trainees.

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

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

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

#### 5. Compliance with Copeland Act Requirements.

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

#### 6. Subcontracts.

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

#### 7. Contract Termination: Debarment.

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

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

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

#### 9. Disputes Concerning Labor Standards.

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

#### 10. Certification of Eligibility.

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

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

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

## **A11 DEBARMENT AND SUSPENSION**

### **A11.1 CERTIFICATION CLAUSES**

#### **A11.1.1 Bidder or Offeror Certification**

##### **CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT**

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

#### **A11.1.2 Lower Tier Contract Certification**

##### **CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT**

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

Checking the System for Award Management at website: <http://www.sam.gov>.

Collecting a certification statement similar to the Certification of Offeror /Bidder Regarding Debarment, above.

Inserting a clause or condition in the covered transaction with the lower tier contract.

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

## **A12 DISADVANTAGED BUSINESS ENTERPRISE**

### **A12.1 REQUIRED PROVISIONS**

#### **A12.1.1 Solicitation Language (Solicitations that include a Contract Goal)**

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

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

- (1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- (2) A description of the work that each DBE firm will perform;
- (3) The dollar amount of the participation of each DBE firm listed under (1);
- (4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal
- (5) Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment; and
- (6) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

#### **A12.1.2 Solicitation Language (Race/Gender Neutral Means)**

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

#### **A12.1.3 Prime Contracts (Projects covered by DBE Program)**

### **DISADVANTAGED BUSINESS ENTERPRISES**

**Contract Assurance (49 CFR § 26.13)** - The Contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

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

## **A13 DISTRACTED DRIVING**

### **A13.1 CONTRACT CLAUSE**

#### **TEXTING WHEN DRIVING**

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

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$10,000 that involve driving a motor vehicle in performance of work activities associated with the project.

## **A14 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT**

### **A14.1 CONTRACT CLAUSE**

#### **PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT**

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [Public Law 115-232 § 889(f)(1)].

## **A15 EQUAL EMPLOYMENT OPPORTUNITY (EEO)**

### **A15.1 MANDATORY CONTRACT CLAUSE**

#### **A15.1.1 EEO Contract Clause**

#### **EQUAL OPPORTUNITY CLAUSE**

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

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

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

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

(8) The Contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

#### **A 15.1.2 EEO Specification**

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

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
  - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
  - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

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

3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

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

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

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

- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a

member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

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

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

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

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

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.

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

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

## **A16 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)**

### **A16.1 SOLICITATION CLAUSE**

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

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

## **A17 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES**

### **A17.1 CERTIFICATION CLAUSE**

This provision is required for all contracts that equal or exceed \$100,000.

#### **CERTIFICATION REGARDING LOBBYING**

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

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

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

## **A18 PROHIBITION of SEGREGATED FACILITIES**

### **A18.1 CONTRACT CLAUSE**

#### **PROHIBITION of SEGREGATED FACILITIES**

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

(b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

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

## **A19 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970**

### **A19.1 CONTRACT CLAUSE**

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

## **A20 PROCUREMENT OF RECOVERED MATERIALS**

### **A20.1 CONTRACT CLAUSE**

#### **PROCUREMENT OF RECOVERED MATERIALS**

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

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

The list of EPA-designated items is available at [www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products](http://www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products).

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

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

## **A21 RIGHT TO INVENTIONS**

### **A21.1 CONTRACT CLAUSE**

#### **RIGHTS TO INVENTIONS**

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

## **A22 SEISMIC SAFETY**

### **A22.1 CONTRACT CLAUSE**

#### **A22.1.1 Construction Contracts**

##### **SEISMIC SAFETY**

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

## **A23 TAX DELINQUENCY AND FELONY CONVICTIONS**

### **A23.1 CERTIFICATION CLAUSE**

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

##### **Certifications**

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

##### **Note**

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

##### **Term Definitions**

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

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

## **A24 TERMINATION OF CONTRACT**

### **A24.1 CONTRACT CLAUSE**

#### **A24.1.1 Termination for Convenience**

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

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

1. Contractor must immediately discontinue work as specified in the written notice.
2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

1. Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;



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

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

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

#### **A24.1.2 Termination for Default**

##### **TERMINATION FOR CAUSE (CONSTRUCTION)**

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

## **A25 TRADE RESTRICTION CERTIFICATION**

### **A25.1 SOLICITATION CLAUSE**

#### **TRADE RESTRICTION CERTIFICATION**

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

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

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

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

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

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

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

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

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

## **A26 VETERAN'S PREFERENCE**

### **A26.1 CONTRACT CLAUSE**

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

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

## **A27 DOMESTIC PREFERENCES FOR PROCUREMENTS**

### **A27.1 CERTIFICATION CLAUSE**

#### **CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS**

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

16A

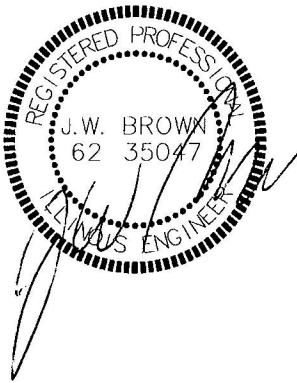
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**SECTION III**  
**FOR**  
**GREENVILLE AIRPORT**

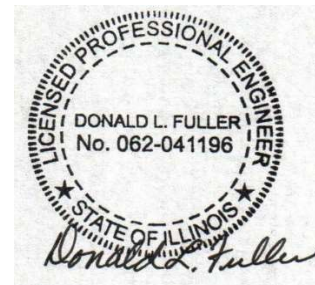
**BOND COUNTY, ILLINOIS**

**ILLINOIS PROJECT NO: GRE-4879**  
**SBG PROJECT NO: 3-17-SBGP-162/171/184**

**REPLACE EXISTING WEATHER EQUIPMENT WITH  
AWOS-II EQUIPMENT**



License Expiration Date:  
November 30, 2023



License Expiration Date:  
November 30, 2023

**March 3, 2023**

**100% SUBMITTAL**

**PREPARED BY:**  
**BROWN & ROBERTS, INC.**  
**1 WESTRIDGE ROAD**  
**HARRISBURG, IL 62946**

**APRIL 28, 2023 LETTING**

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## **FOREWORD**

These Special Provisions, together with applicable Standard Specifications for Construction of Airports including Supplemental Specifications and Recurring Special Provisions, Rules and Regulations, Contract Requirements for Airport Improvement Projects, Payroll Requirements and Minimum Wage Rates which are hereto attached or which by reference are herein incorporated, cover the requirements of the State of Illinois, Department of Transportation (IDOT), Division of Aeronautics (Division) for the following improvement project at the Greenville Airport, Greenville, Illinois, including:

## **SCOPE OF WORK**

The project scope consists of the removal of the existing weather observation equipment and construction of a turnkey Automated Weather Observing System (AWOS-II) and other necessary and related work.

## **GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS**

The Standard Specifications for Construction of Airports, Illinois Department of Transportation, Division of Aeronautics, adopted September 25, 2020, shall govern the project except as otherwise revised or noted in these Special Provisions. All references to IDOT Specifications refer to Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2022, as revised.

## **GENERAL**

It will be the responsibility of the Contractor to provide all certifications, waivers or any necessary documents required on behalf of the Greenville Airport in order to maintain compliance with the current Buy American Preference provisions for the Airport Improvement Program.

The Contractor shall submit a Safety Plan Compliance Document (SPCD) confirming compliance with the Construction Safety Phasing Plan (CSPP) prior to the issuance of the Notice to Proceed as specified in FAA AC 150/5370-2G.

**DIVISION I**

**SECTION 40**  
**SCOPE OF WORK**

40-05 Maintenance of Traffic.

Add the following to this section:

Larry Kleiner, acting as the Airport Manager, will give proper notice to the nearest Flight Service Stations and the Airways Facilities Chief, of the Federal Aviation Administration prior to beginning construction.

The Contractor shall consult with the Resident Engineer in arranging their construction operations. The Airport Manager will at all times have jurisdiction over the safety of air traffic during construction. Wherever the safety of air traffic during construction is concerned, his decisions as to methods, procedures and measures used shall be final, and any and all Contractors performing work must be governed by such decisions.

**SECTION 50**  
**CONTROL OF WORK**

50-06 Construction Layout Stakes

Add the following to this section:

All construction layout necessary for the construction of the various pay items will be the responsibility of the Contractor. Horizontal and vertical control will be furnished by the Engineer.

**SECTION 60**  
**CONTROL OF MATERIALS**

60-01 Source of Supply and Quality Requirements

Add the following to this section:

The Contractor will furnish the Engineer with certification documents or other evidence of compliance prior to the installation of any material item into this project. The Resident Engineer will not report undocumented quantities for payment and the Engineer may request them to be removed from the project.

**SECTION 70**  
**LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**

70-10 Barricades, Warning Signs and Hazard Markings.

Add the following to this section:

The Contractor shall provide a flagger at the north edge of the t-hangar complex during hauling operations.

It is anticipated that no construction activities associated with this project will impact any aircraft operations on the airport runways. Any work within 125' of the centerline of a runway will require closure of that runway, to include the extended runway centerline to 600-ft of the physical ends in order to keep the runway approach clear. Runway 9-27 will remain open at all times. When temporary closures are necessary, the Contractor will accomplish the required work as quickly as possible and withdraw a sufficient distance that will allow opening the runway.

The Contractor will notify the Airport Manager seven (7) days in advance of the commencement of work which would necessitate the closing of a runway or taxiway. It will be the responsibility of the Contractor to properly mark or barricade the closed runway and remove the marking or barricades when reopened. It is the Airport Manager's responsibility to issue all NOTAM's required for the construction of this project.

The appropriate marking for a closed runway is a yellow cross, placed at both ends of the runway. The legs of the cross will be sixty (60') feet in length and ten (10') feet in width. The crosses will be constructed of any suitable, locally available material such as fabric, plywood, plastic or other similar material. They will be held in place in a manner locally determined to be suitable. The Contractor will be responsible for placing and removing the crosses as the runway is closed and reopened. Placement, removal, and maintenance of the crosses shall be the responsibility of the Contractor and is incidental to the contract, no additional compensation will be allowed.

The Contractor will provide the Resident Engineer with a proposed schedule of frequency and duration of runway closures for the project. The Project Engineer must review and approve this schedule before any construction begins.

When the Contractor's vehicles are on the airport proper, they shall be properly marked. The markings shall consist of a three (3') foot square flag consisting of a checkered pattern of international orange and white squares of not less than one (1') foot per side, displayed in full view above the vehicle. The flags are not required for vehicles used for continuous hauling of materials to the project from off of the airport property. The Contractor shall make two flags available for the Resident Engineer and inspectors.

The Contractor will be responsible for placing barricades and/or traffic cones at any location directed by the Airport Manager. It will be the Contractor's responsibility to furnish and maintain the barricades, equipped with red flashing lights throughout the duration of this project. The maximum distance between barricades is 10-ft with a minimum of two barricades.

The barricades and traffic cones and their maintenance will be considered as an incidental item to the contract and no additional compensation will be allowed. Any cost of labor and equipment necessary to insure safety at the airport during the duration of the project will be considered incidental to the contract and no additional reimbursement for these items of work will be received.

70-12 Protection and Restoration of Property.

Add the following to this section:

The Contractor shall take special care when working in the vicinity of existing airport lighting systems not to damage them. Should the Contractor damage any of the lighting systems, he shall immediately make any necessary repairs or replacement to place them in working order. No electrical circuit will be allowed to remain out of service overnight. The cost of equipment and making the repairs will be the responsibility of the Contractor. If during the course of construction, it is necessary to interrupt any electrical circuits temporary cables shall be installed as needed to make the circuit operational.

Active areas shall be kept broom clean at all times.

The Contractor shall maintain the premises in reasonably clean condition and shall not allow any sizeable accumulation of rubbish on the premises.

The Contractor shall leave the premises in broom clean condition upon completion of the project.

The Contractor shall take every precaution against fire.

70-17 Contractor's Responsibility for Utility Service and Facilities of Others.

Add the following to this section:

The Contractor is responsible for contacting all utility companies and organizations that have lines or conduits in the proposed work area. All lines and conduits shall be located and identified for depth before any excavation begins. The Contractor shall call JULIE (1-800-892-0123) to accomplish these requirements. The Contractor is responsible for identifying all non-JULIE utilities located within the proposed construction limits. These utilities are to be located prior to the start of construction.

70-21 Environmental Protection.

Add the following to this section:

The Contractor will be required to minimize air pollution from dust by watering disturbed areas at whatever frequency necessary in order to control the creation of airborne dust. The furnishing and distribution of the water will be considered as an incidental item to the contract, and no additional compensation will be allowed.



**SECTION 80**  
**PROSECUTION AND PROGRESS**

80-13 Contractor's Access to Airfield.

Add the following to this section:

The Contractor will use only the designated haul route and equipment parking area and airport access as shown on Sheet No. 3 of the construction plans. The Contractor's personnel and equipment shall not traverse outside the designated work areas to other locations on the airport. The designated haul route will be the only vehicular access to the construction site. Barricades and road closed signs are the responsibility of the Contractor at no additional cost to the contract.

80-14 Sequence of Work.

Add this section:

The following sequence of work shall be followed for the major construction items:

1. Removal of existing weather observation equipment.
2. Preparation of the AWOS-II site.
3. Construction of cabling and conduit necessary to connect new AWOS.
4. Construction of new AWOS-II system.
5. Construction of Class E Fencing and Gate.
6. Construction of improvements to AWOS access road.
7. Seeding and Mulching of all project areas.
8. Clean up project site.

**DIVISION II**

**ITEM 150520**  
**MOBILIZATION**

**DESCRIPTION**

105-1.2 Mobilization Limit. Revise this section to read as follows:

Mobilization shall be limited to 10% of the original contract amount. Should the bid for Mobilization exceed 10%, the amount over 10% will not be paid until Final Acceptance of the project by the Engineer.

**BASIS OF PAYMENT**

105-3.1 Add the following to this section:

Payment will be made under: Item AR150520 – Mobilization – per Lump Sum.

**END ITEM 150520**

**ITEM 152**  
**EXCAVATION, SUBGRADE, AND EMBANKMENT**

152-5.1 Add the following to this section:

Payment will be made under: Item AR152411 – Unclassified Excavation – per Lump Sum.

**END ITEM 152**

**ITEM 209 – CRUSHED AGGREGATE BASE COURSE**

Item 209 Crushed Aggregate Base Course is modified as outlined below:

**MATERIALS**

209-2.1 Crushed Aggregate shall be gradation CA-06 or CA-10 meeting Section 1004 of the Illinois Department of Transportation’s “Standard Specifications for Road and Bridge Construction” Adopted January 1, 2022.

**BASIS OF PAYMENT**

209-5.1

Add:

Payment will be made under: Item AR209510 – Crushed Aggregate Base Course – per Ton.

**END ITEM 209**

## DIVISION III – FENCING (WIRE FENCES)

### ITEM 162 - CHAIN-LINK FENCES

(Class E)

Revise Item 162 of the Standard Specifications as follows:

#### DESCRIPTION

162-1.1 Add the following to the end of the section:

“All metal materials used in the fencing and the fencing materials shall be fabricated from steel made in the United States. The Contractor shall provide a certification that the material was 100 percent domestic made steel, and that all fencing and fencing materials were fabricated in the United States. In addition, the Contractor shall also provide a written certification that all fence materials used on the project meet the specifications set forth in the Contract Documents.”

#### MATERIALS

162-2.3 Fence Posts, Post Tops and Extensions, Rails, Gates, Stretcher Bars, and Clips: Add the following to this section:

“Fence materials shall meet the specified requirements for 6-foot chain-link fence based upon the details shown in the Plans.”

Add:

162-2.11 Certification and Shop Drawings:

The Contractor shall provide written certification that all material meets project specification requirements prior to start of the work. Shop drawings shall be submitted to the Engineer for review prior to the start of construction.

#### CONSTRUCTION METHODS

Add the following:

162-3.13 AWOS Facility Site Fence Grounding Requirements: The new fence around the AWOS site shall be bonded and grounded to the AWOS site ground ring as detailed on the Plans and as specified herein.

- A. Fences made of conducting material, i.e. chain link fabric, metal crossbar, stranded wire, shall be constructed using metal posts which extend a minimum of 2 feet below grade, (or deeper where specified herein). Metallic fence fabric with non-conductive coatings shall not be used.
- B. Gates shall have a 1 in. by 1/8 in. flexible tinned copper bond strap or an insulated #4/0 AWG flexible (welding) copper cable that is bonded to the adjacent post (exothermic welding is recommended). The posts at each side of the gate shall also be bonded, at a height no greater than 1 foot above grade, to the respective ground ring with a #2 AWG (minimum) bare copper cable. The bonding strap to the post shall be installed so as not to limit full motion (swing) of the gate. Additionally, a horizontal bare #6 AWG stranded copper conductor shall be woven through the gate fabric and mechanically bonded to the gate rails with UL listed grounding connectors sized for the respective rails and respective conductor.
- C. A horizontal bare #6 AWG stranded copper conductor shall be woven through the fence fabric and mechanically bonded to the fence posts at intervals not greater than 40 feet. The mechanical connectors shall be UL listed ground connectors, Burndy Type GAR ground connector, or approved equal, sized for the respective fence post and the #6 AWG copper cable. The fence posts with these bonds and the fence posts adjacent to gates shall be bonded to the respective site ground ring with a #2 AWG (minimum) bare copper cable. Connections to fence posts shall be with UL listed pipe grounding clamps with bronze hardware or exothermically weld connection. Connections to the ground ring shall be exothermic weld type connections; Cadweld by Erico Products, Inc., Solon, Ohio, (800-248-9353), Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (918-663-1440), or approved equal, using the appropriate molds for the respective application and respective sizes of conductors.

#### BASIS OF PAYMENT

Payment will be made under:

Item AR162506 - Class E Fence 6' per Foot.

Item AR162606 – Class E Gate – 6' per Each.



The fertilizer shall be incorporated into the soil to the depth of not less than two (2") inches.

### CONSTRUCTION METHODS

#### 901-3.4 Maintenance of Seeded Areas.

Delete the second paragraph of this section and add the following:

The contractor will be required to establish a good stand of grass of uniform color and density to the satisfaction of the Engineer. If at the time when the contract has been otherwise completed it is not possible to make an adequate determination of color, density and uniformity of such stand of grass, the item of work will be reviewed at a later date determined by the Illinois Division of Aeronautics.

### BASIS OF PAYMENT

#### 901-5.1

ADD:

Payment will be made under: Item AR901525 – Seeding – per Lump Sum.

### **ITEM 908** **MULCHING**

Item 908 Mulching is modified as outlined below:

#### DESCRIPTION

908-1.1 Revise this section to read as follows:

This item shall consist of the furnishing, transporting, and placing mulch over the seeded area. Disturbed areas outside the grading limits shall also be mulched in accordance with this specification, at no additional cost to the Contract.

#### MATERIALS

#### 908-2.1 Mulch Material.

Add the following to this section:

The materials shall meet the requirements of Article/Section 251.02 (b) of the Standard

Specifications for Road and Bridge Construction.

### CONSTRUCTION METHODS

#### 908-3.1 Mulching.

Add the following to this section:

Mulch shall be applied to all designated areas within 24 hours after the sowing of the seed. The mulching methods shall meet the requirements of Section 251. Mulch, either Method 2 or Method 3 of the Standard Specification for Road and Bridge Construction, January 1, 2022; Illinois Department of Transportation. If Method 2 is used, Procedure 3 will not be allowed.

### BASIS OF PAYMENT

All mulching shall be considered incidental to pay Item AR901525, Seeding. This payment shall be full compensation for furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.



## DIVISION VI – LIGHTING INSTALLATION

### ITEM 108 INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

#### DESCRIPTION

108-1.1. Add the following to this section:

“This Item of work shall also consist of the installation of conduit by directional-boring method. All AWOS cable shall be in conduit. Also included are the installation of ground wires, ground rods and connections, cable splicing, cable marking, cable testing, and all incidentals necessary to place the cable in operating condition as a completed unit to the satisfaction of the RPR.

**Add the following:**

108-1.2 REFERENCES.

- A. ASTM Specification B3 – Standard Specification for Soft or Annealed Copper Wire.
- B. ASTM Specification B8 – Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft.
- C. FAA Advisory Circular 150/5345-7F, (or latest edition) "SPECIFICATIONS FOR L-824 UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS.
- D. FAA AC No. 150/5345-53 “AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM” (most current issue) and AC150/5345-53D, AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM Appendix 3 Addendum.
- E. FAA AC No. 150/5370-2G (or most current issue) “OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
- F. Federal Specification A-A-59544 Cable and Wire, Electrical (Power, Fixed Installation).
- G. NFPA 70 – National Electrical Code (most current issue in force).
- H. NFPA 70E – Standard for Electrical Safety in the Workplace.
- I. OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures.
- J. UL Standard 44 – Thermoset-Insulated Wires and Cables.
- K. UL Standard 83 – Thermoplastic-Insulated Wires and Cables.

108-1.3 SHOP DRAWINGS.

The Contractor shall furnish shop drawings for approval before ordering equipment and/or materials. Shop drawings are required for each wire, conductor, and/or cable type to be used on the project. **Shop drawings shall be clear and legible. Copies that are illegible will be rejected.** Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus 4 copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. **Certification of compliance with the AIP (Airport Improvement Program) Buy American Preferences for all materials and equipment. Do not submit ARRA (American Recovery and Reinvestment Act) certification as a substitute for certification of compliance with the AIP Buy American Preferences. Shop drawings submitted without certification of compliance with the Airport Improvement Program Buy American Preferences or without certification of manufacture in the United States of America in accordance with the AIP Buy American Requirements will be rejected. See the FAA website at: [http://www.faa.gov/airports/aip/buy\\_american/](http://www.faa.gov/airports/aip/buy_american/) for more information on the AIP Buy American Preferences requirements. FAA approved equipment that is on the FAA Buy American Conformance List or the list of Nationwide Buy American Waivers Issued by the FAA complies with the AIP Buy American Preferences and will not require additional waiver paperwork for AIP projects. See the FAA website at: [http://www.faa.gov/airports/aip/buy\\_american/media/nationwideBuyAmericanWaiversIssued.pdf](http://www.faa.gov/airports/aip/buy_american/media/nationwideBuyAmericanWaiversIssued.pdf) for a list of Nationwide Buy American Waivers Issued by the FAA.**
- B. In order to expedite the shop drawing review, inspection and/or testing of materials, the Contractor shall furnish complete statements to the Project Engineer as to the origin, composition, and manufacturer of all material 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.
- C. Indicate the pay item number for each respective cable and/or cable in unit duct.
- D. Shop drawings shall include wire/conductor/cable cut sheets with type, size, specifications, ETL or UL listing, manufacturer, and catalog or part number.
- E. Shop drawings for cable in unit duct items shall include cut sheets with type, size, specifications, ETL or UL listing, manufacturer, and catalog or part number for the respective unit duct.
- F. Where cable is required to have colored coded insulation, provide information on the color coding for the respective conductors.

#### EQUIPMENT AND MATERIALS

108-2.1 GENERAL. Add the following to this section:

“All cable shall be FAA approved or UL-listed as suitable for installed application. Cable furnished on this project shall comply with the requirements of the “Airport Improvement Program Buy American Preference requirements. All conductors shall be Copper.”

108-2.2 CABLE. Revise this section to read as follows:

“L-824 Cable – L-824 cable shall be FAA L-824, Type C and shall conform to the requirements of FAA Advisory Circular 150/5345-7F, (or latest edition) "SPECIFICATIONS FOR L-824 UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS". L-824 cable shall be FAA approved and listed in the current AC150/5345-53D, AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM Appendix 3 Addendum. Circuits for use with constant current regulator outputs (runway or taxiway lighting circuits) shall use 5000-Volt rated cable. Circuits for use with low voltage applications (600 Volts or below) shall use either 5000-Volt rated cable or 600-Volt rated cable and shall have colored insulation corresponding to the respective voltage system. Cable shall be manufactured in the United States of America to comply with the Airport Improvement Program Buy American Requirement or be on the Federal Aviation Administration list of Nationwide Buy American Waivers.

Cable for use with airfield lighting series circuits (including runway lighting, taxiway lighting and signs) shall be one conductor No. 8, 5,000-Volt, FAA L-824, Type C, stranded.

Item 108158, 1/C #8 5KV UG Cable in UD shall be one conductor No. 8, 5,000-Volt, FAA L-824, Type C, stranded, in unit duct.

Item 108159, Low voltage power cable shall be FAA L-824, 600V, Type C.

108-2.5 RESERVED. Revise 108-2.5 as follows: “108-2.5 SPLICER QUALIFICATIONS. Every airfield lighting cable splicer shall be qualified in making cable splices and terminations on cables rated at and/or above 5000 Volts AC. The Contractor shall submit to the Project Engineer proof of the qualifications of each proposed cable splicer for the cable type and voltage level to be worked on. Cable splicing/terminating personnel shall have a minimum of three (3) years continuous experience in terminating/splicing medium voltage cable.”

108-2.12 LINE MARKING TAPE. Delete this section.

108-2.13 UNIT DUCT. Add the following to this section:

“Standard sizes of smooth wall polyethylene duct shall conform to the dimensional requirements specified below.

\*Dimensions include allowance for duct eccentricity.”

Nominal Duct Size	Nominal Inside Diameter	Nominal Standard Wall	Nominal Outside Diameter*
¾"	0.910"	0.070"	1.050"
1"	1.145"	0.085"	1.315"
1-1/4"	1.440"	0.110"	1.660"
1-1/2"	1.650"	0.125"	1.900"
2"	2.065"	0.155"	2.375"
2-1/2"	2.449"	0.213"	2.875"
3"	3.048"	0.226"	3.500"
4"	4.000"	0.250"	4.500"

### CONSTRUCTION METHODS

108-3.1 GENERAL. Add the following to this section:

“The cable quantities as shown on the Construction plans are based on straight-line measurement. All other cable lengths, such as slack or waste, will not be measured for payment.

If the Contractor wishes to lay cable on a line other than that shown on the Plans, he shall obtain approval of the Resident Engineer/Resident Project Representative before doing so. Any additional cable needed because of such change will be at the Contractor's expense.

Only cable in unit duct may be plowed or directional-bored.

The Contractor shall identify all existing underground utilities located within the area where the proposed cables are being installed and will take all precautions to protect these utilities from damage. Care shall be taken so as not to damage any existing circuits. Any existing circuits damaged shall be immediately repaired to the satisfaction of the Engineer and/or the respective utility or owner where applicable. Any underground utility damaged will be repaired or replaced at the Contractor’s own expense. Any repairs of existing cables will be considered incidental to the contract, and no additional compensation will be allowed. Contractor shall coordinate work and any power outages with the Airport Manager or respective Airport personnel. Any shutdown of existing systems shall be scheduled with and approved by the Airport Manager prior to shut down. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow U.S. Department of Labor Occupational Safety & Health Administration (OSHA) 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures, including, but not limited to, 29 CFR Section 1910.147 The Control of Hazardous Energy (lockout/tagout).

Contractor shall comply with the requirements of FAA AC No. 150/5370-2G (or most current issue) “OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION”.

Contractor shall comply with the applicable requirements of NFPA 70E – Standard for Electrical Safety in the Workplace.

All temporary installations shall comply with National Electrical Code Article 590 – “Temporary Installations.” The Contractor shall secure, identify, and place temporary exposed wiring in conduit, duct, or unit duct to prevent electrocution and fire ignition sources in conformance with the requirements of FAA AC 150/5370-2G, Part 218, Paragraph c.

All cables installed by the Contractor shall be properly labeled and tagged at all points of access (handholes, manholes, terminal panels, control panels, and the respective wireway in the vault).

All changes to the airfield lighting system shall be documented by the Contractor and provided to the Resident Engineer/Resident Project Representative.”

108-3.2 INSTALLATION IN DUCT OR CONDUIT. Add the following to this section:

“The cable will be run continuous through all ducts and conduits. Where cable in unit duct enters a handhole or manhole with a continuous duct bank system to the termination point (such as from a handhole to the vault or between handholes and/or manholes) the unit duct will not be required for the respective cable.”

108-3.3 TRENCHING. Add the following to this section:

“F. Cable installed in cultivated fields shall be installed a minimum of 42 in. below grade.

G. Any and all trenches will be backfilled to a smooth grade to the satisfaction of the Engineer. All trench settlement shall be corrected for a period of one year. Restoration, grading, and seeding of areas disturbed during the installation of the proposed cable will be incidental to the respective 108 Pay Item.”

108-3.5 SPLICING. Add the following to this section:

“In-line connections for existing cables cut during construction shall be repaired with a cast splice kit. The Contractor shall have a minimum of two splice kits on the job site at all times for emergency repairs. Cast splice kits shall be specified in paragraph (a) of Item 108-2.4. **Splice cans shall be provided for existing cables cut and repaired for each splice in cables not to be abandoned. Where a splice can is not readily available at the time of the cable damage, splice markers shall be temporarily installed over each splice in cables not to be abandoned, then these splices shall later be replaced with new splices in an L-867 splice can.**

There shall be no splices between series lighting circuit isolation transformers. In the event that a series lighting circuit cable is cut between isolation transformers, the entire length of cable between these isolation transformers shall be replaced, at the Contractor’s own expense.

The Contractor shall use a cable stripper/penciller whenever cable connections are made.

All splices and connections will be considered incidental to the respective cable.”

108-3.8 TESTING. Add the following to this section:

“K. All existing series circuit cables are to be abandoned in place. No testing of these circuits will be required.

**Add the following:**

108-3.12 LOCATING OF EXISTING UNDERGROUND UTILITIES AND CABLES. The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor’s responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans, and shall obtain, from the respective utility companies, detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment, where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner’s Representative and/or the Resident Engineer/Resident Project Representative shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract.

All utility cables and lines shall be located by the respective utility. **Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123.** Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

Payment for locating and marking underground utilities and cables will not be paid for separately but shall be considered incidental to the plowing/trenching/boring of cable and cable in unit duct.

108-3.13 SEPARATION OF HIGH-VOLTAGE AND LOW-VOLTAGE WIRING. Low-voltage wiring shall maintain separation from high-voltage wiring. Low-voltage wiring and high-voltage wiring shall not be installed in the same raceway, handhole, or junction box. Where necessary provide split flexible duct around low voltage cables located in a handhole with high voltage cables, to isolate the cables from possible contact with each other.

108-3.14 IDENTIFICATION OF CABLES. At electrical handholes and manholes, identify and label each cable originating in the vault with respect to the system or device served. Provide identification tags rated suitable for the respective locations with permanent markings.

METHOD OF MEASUREMENT

108-4.2. Revise this section to read as follows:

“The footage of counterpoise, fixture grounding, cable installed in duct, conduit, or raceway to be paid for shall be the number of linear feet of cable installed in duct, conduit, or raceway measured in place by direct measurement, completed, ready for operation and accepted as satisfactory with no allowance being made for overrun due to slack, turns, splices, etc. Slack cable required to perform cable splices outside of the respective splice cans, handholes, or manholes, shall be incidental to the respective cable pay item and no additional measurement for payment will be made. Cable will be measured for payment from the respective termination or splice point in the field up to the vault. Cable or cable in unit duct installed inside or below the vault shall be incidental to Item 108 and no additional measurement for payment will be made.” Ground rods are considered incidental to the counterpoise and grounding systems.

108-4.3 No separate payment will be made for ground rods.

#### BASIS OF PAYMENT

108-5.1. Add the following to this section:

“Payment will be made at the contract unit price per lin. ft of cable, counterpoise and grounding completed and accepted by the Engineer. This price shall be full compensation for furnishing all materials, and for all preparation, assembly, and installation of these materials; for all plowing, trenching, directional-boring, coring of manholes or handholes, installation in ducts, raceways, conduits, splice cans, handholes, or manholes, and for all excavation and backfilling; for all site restoration (top soiling, grading, seeding, mulching) and pavement restoration; and for all labor, equipment, tools, and incidentals necessary to complete this Item.

Payment will be made under:

Item AR108051, Power Cable in UD – per Foot.

**END OF ITEM 108**

**ITEM 109 INSTALLATION OF AIRPORT TRANSFORMER VAULT AND VAULT EQUIPMENT**

**DESCRIPTION**

109-1.1 Add the following:

“This item of work shall consist of all work inside the existing t-hangar building as shown on the Construction Plans.”

**CONSTRUCTION METHODS**

109-3.1 GENERAL. Add the following to this section:

“The Contractor shall coordinate all work inside the existing t-hangar building with the Airport Manager and the Resident Engineer. All work shall be completed in such a manner to minimize the service interruption of each of the airfield electrical components served through the existing electrical vault.”

**METHOD OF MEASUREMENT**

109-4.3: Add the following to this section:

“All labor, materials and equipment necessary to make all completed systems in the t-hangar building accepted as a complete unit ready for operation shall be measured as a Lump Sum item and no additional compensation will be allowed.”

**BASIS OF PAYMENT**

109-7.2: Add the following to this section:

Payment will be made under:

Item AR109200 – Install Electrical Equipment – per Lump Sum.

**END OF ITEM 109**



## ITEM 110 INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT

### DESCRIPTION

110-1.1 Add the following to this section:

“This item of work shall consist of the installation of all proposed conduits and ducts as shown on the Construction Plans. This work shall include the removals of all existing electrical system components to be removed, and also the installation of all new or replaced system components.”

#### **Add the following:**

#### 110-1.2 REFERENCES.

- A. ANSI C80.1 – Rigid Steel Conduit, Zinc Coated.
- B. ANSI C80.4 – Fittings Rigid Metal Conduit and EMT.
- C. ASTM D3350 – Specification of Polyethylene Plastics Pipe and Fittings Materials.
- D. ASTM F2160 – Standard Specification for Solid Wall, High-Density Polyethylene Conduit Based on Controlled Outside Diameter.
- E. NEMA TC-2 – Electrical Plastic Tubing and Conduit.
- F. NEMA TC-3 – Fittings Rigid PVC Conduit and Tubing.
- G. NEMA Specification TC-7 – Smooth-Wall Coilable Polyethylene Electrical Plastic Conduit.
- H. NFPA 70 – National Electrical Code (NEC), most current issue in force.
- I. UL Standard 6 – Rigid Metal Conduit.
- J. UL Standard 514B – Conduit, Tubing and Cable Fittings.
- K. UL Standard 651 – Schedule 40 and 80 Rigid PVC Conduit.
- L. UL Standard 651B – Standard for Continuous Length High-Density Polyethylene (HDPE) Conduit.

110-1.3 SHOP DRAWINGS. The Contractor shall furnish shop drawings for approval before ordering equipment and/or materials. Shop drawings are required for each type of conduit or duct to be used on the project. **Shop drawings shall be clear and legible. Copies that are illegible will be rejected.** Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus 4 copies to be retained by

the Project Engineer. Shop drawings shall include the following information:

- A. Certification of compliance with the AIP (Airport Improvement Program) Buy American Preferences for all materials and equipment. Do not submit ARRA (American Recovery and Reinvestment Act) certification as a substitute for certification of compliance with the AIP Buy American Preferences. Shop drawings **submitted without certification of compliance with the Airport Improvement Program Buy American Preferences or without certification of manufacture in the United States of America in accordance with the AIP Buy American Requirements will be rejected. See the FAA website at: [http://www.faa.gov/airports/aip/buy\\_american/](http://www.faa.gov/airports/aip/buy_american/)** for more information on the AIP Buy American Preferences requirements.
- B. In order to expedite the shop drawing review, inspection and/or testing of materials and equipment, the Contractor shall furnish complete statements to the Project Engineer as to the origin and manufacturer of all materials and equipment 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 and equipment.
- C. Indicate the pay item number for each respective conduit or duct.
- D. Shop drawings shall include conduit and/or duct cut sheets with type, size, specifications, UL listing, manufacturer, and catalog or part number.
- E. Provide certification that the respective steel conduits used on this project are manufactured from 100 percent domestic steel.

### EQUIPMENT AND MATERIALS

110-2.1 GENERAL. Add the following to this section:

“All materials for these items shall be in accordance with the FAA Standard Specification 110 Equipment and Materials, as detailed on the Plans, and as specified herein.

- A. Conduit for concrete encased duct shall be Schedule 40 Polyvinyl Chloride (PVC), sized as detailed on the Plans.
- B. The duct to be directional-bored shall be Schedule 40 PVC Conduit, Schedule 80 PVC Conduit or High-Density Polyethylene (HDPE) duct, (Schedule 40, Schedule 80, SDR 9, SDR 11, or SDR 13.5).”

110-2.2 STEEL CONDUIT. Replace this section with the following:

“Rigid Steel Conduit and fittings shall be hot-dipped, galvanized, UL-listed, and produced in accordance with UL Standard 6 – Rigid Metal Conduit and ANSI C80.1 – Rigid Steel Conduit,

Zinc Coated. Couplings, connectors, and fittings for rigid steel conduit shall be threaded, galvanized steel or galvanized, malleable iron, specifically designed and manufactured for the purpose. Fittings shall conform to ANSI C80.4 – Fittings Rigid Metal Conduit and EMT and UL 514B – Conduit, Tubing, and Cable Fittings. Set screw type fittings are not acceptable. Steel used to manufacture conduits shall be 100 percent domestic steel. Contractor shall provide certification that the respective steel conduits used on this project are manufactured from 100 percent domestic steel.

Miscellaneous Fittings. Fittings shall be suitable for use with conduits and ducts supplied. All fittings for use with rigid metal conduit shall be threaded. Set screw-type fittings are not acceptable. All conduit bodies, fittings, and boxes installed in classified hazardous locations (Class I, Division 1 or 2, Group D) shall be suitable for use in Class I, Division 1, and Group D locations. Fittings shall be as manufactured by Appleton, Crouse-Hinds, Hubbell-Killark, O-Z/Gedney, or approved equal.”

110-2.3 PLASTIC CONDUIT. Add the following to this section:

“Conduits shall be suitable for underground applications encased in concrete or direct burial, and suitable for exposed applications aboveground.

- A. Conduits for concrete encasement shall be Schedule 40 PVC, UL-listed, rated for 90°C cable-conforming to NEMA Standard TC-2 and UL 651, listed suitable for concrete encasement.
- B. Conduits for directional boring shall be Schedule 40 PVC or Schedule 80 PVC conduit, UL-listed, rated for 90°C cable-conforming to NEMA Standard TC-2 and UL 651 and suitable for directional boring installation, Schedule 40 HDPE or Schedule 80 HDPE conduit, UL-listed, conforming to NEMA Standard TC-7 and UL 651B and suitable for directional boring installation, or Wall Type SDR 9, SDR 11, or SDR 13.5 HDPE conduit manufactured in accordance with ASTM D-3350 (Specification of Polyethylene Plastics Pipe and Fittings Materials) and ASTM F2160 (Standard Specification for Solid Wall, High-Density Polyethylene Conduit Based on Controlled Outside Diameter), and suitable for directional boring installation. **Per NEC 300.5 (K), raceways installed using directional boring equipment shall be approved for the purpose. Provide manufacturer’s literature confirming the respective duct is suitable for directional boring with the respective Shop Drawing submittal.**
- C. Conduits for direct burial in earth shall be PVC Schedule 40 (minimum wall thickness), UL-listed, rated for 90°C cable-conforming to NEMA Standard TC-2 and UL 651, listed suitable for direct burial in earth, or HDPE Schedule 40 (minimum wall thickness), conforming to NEMA Standard TC-7 and UL 651B, or HDPE SDR 13.5 (minimum wall thickness) manufactured in accordance with ASTM D-3350 (Specification of Polyethylene Plastics Pipe and Fittings Materials) and ASTM F2160 (Standard Specification for Solid Wall, High-Density Polyethylene Conduit Based on Controlled Outside Diameter). Conduits shall be suitable for direct burial in earth and/or concrete encasement.

## CONSTRUCTION METHODS

110-3.1 GENERAL. Add the following to this section:

“The proposed conduits and ducts shall be constructed at the locations and in accordance with the details shown on the Construction Plans. Ducts shall be installed 18 in. minimum below grade. Where detailed on the Plans or where required to avoid obstructions, ducts shall be buried deeper. Where concrete-encased duct interfaces to directional-bored duct at a pavement crossing, the concrete encasement shall be installed up to the respective pavement edge. Where concrete-encased duct interfaces to an electrical handhole or manhole, the concrete encasement shall be installed up to the respective handhole or manhole. Provide bushings or bells at conduit terminations in electrical handholes or manholes.

Underground ducts installed by directional-boring method shall be installed in a manner that will not damage any existing underground utilities and shall not disturb or damage the respective pavement or roadway surface. Ducts shall be directional-bored at the locations shown on the Construction Plans. The ducts will be bored at a minimum depth of 24 in. below the bottom of the pavement it is being bored under. Ducts installed under paved areas and roadways shall extend a minimum of 3 ft. beyond the respective pavement or roadway surface. A pull wire will be left in the conduit if it is to be left vacant. The ends of the conduit will be sealed with approved plugs.

The Contractor will determine if there is a conflict between the installation of the proposed electrical ducts and any existing utilities. He will make all necessary adjustments in depth of installation to avoid any and all proposed underground improvements.”

110-3.7 RESTORATION. Add the following to this section:

“Any and all trenches and disturbed areas will be backfilled and restored to a smooth grade and seeded to the satisfaction of the Engineer. All trench settlement shall be corrected for a period of one year. Restoration, grading, and seeding of areas disturbed during the installation of the proposed ducts will be incidental to the respective pay item for which the duct is installed. The fertilizing and seeding will be completed in accordance with Items 901 and 908 but will be incidental to the respective pay item for which the duct is installed.”

**Add the following:**

110-3.8 LOCATING EXISTING UNDERGROUND UTILITIES AND CABLES. The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor’s responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal

or adjustment, where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer/Resident Project Representative shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract.

All utility cables and lines shall be located by the respective utility. **Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123.** Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

The Contractor shall locate and mark all existing cables within ten (10) feet of proposed excavating/trenching area. Any cables found interfering with proposed excavation or cable/trenching shall be hand dug and exposed. Any damaged cables shall be immediately repaired to the satisfaction of the Resident Engineer/Resident Project Representative at the Contractor's expense. The Resident Engineer/Resident Project Representative and Owner shall be notified immediately if any cables are damaged.

Payment for locating and marking underground utilities and cables will not be paid for separately but shall be considered incidental to the respective duct installation.

#### METHOD OF MEASUREMENT

110-4.1. Add the following to this section:

“The quantity of conduit to be paid for shall be the number of lin. ft of ducts of the particular type installed and measured in-place, complete, and accepted by the Resident Engineer/Resident Project Representative.”

#### BASIS OF PAYMENT

110-5.1. Add the following to this section:

“Payment will be made at the contract unit price per each type and size of conduit, completed and accepted. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials; for all sawing and pavement removal; for all duct interface work to handholes/manholes including coring of handholes/manholes; for all excavation and backfilling with aggregate backfill, earth backfill, and concrete; and for all labor, coordination, equipment, tools, and incidentals necessary to complete this Item.

Payment will be made under:

Item AR110014 - 4" Directional Bore - per Foot.

## END OF ITEM 110

**Add the following:**

### ITEM 110610 ELECTRICAL HANDHOLE

#### DESCRIPTION

110610-1.1. This item of work shall consist of the construction of electrical handholes with lids complete, in accordance with this Specification and as detailed on the Construction Plans.

110610-1.2 SHOP DRAWINGS. The Contractor shall furnish shop drawings for approval before ordering equipment and/or materials. Shop drawings are required for each type of conduit or duct to be used on the project. **Shop drawings shall be clear and legible. Copies that are illegible will be rejected.** Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus 4 copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. Concrete mix design for handholes to be cast in place.
- B. Precast concrete handholes and manholes must be on IDOT (Illinois Department of Transportation) List of Certified Precast Concrete Producers. Provide information on respective precast concrete producer for precast handholes and drawings for respective handholes.
- C. Provide cut sheets with part number and specification for handhole frame and lid.

#### MATERIALS

110610-2.1. The electrical handhole shall be constructed in accordance with the details as shown on the Construction Plans. The concrete shall conform to Item 610. The handholes shall be provided with heavy duty square slab type manhole frames and solid lids suitable for H20 loading, NEENAH R-6662-PP frame and lid, or an approved equal. Lids for the handholes containing high voltage cables shall include lettering labeled "HIGH VOLTAGE". Lids for the handholes containing low voltage cables shall include lettering labeled "LOW VOLTAGE".

#### CONSTRUCTION METHODS

110610-3.1. The electrical handholes shall be constructed in accordance with the details as shown on the Construction Plans.

The Contractor shall connect the conduits from the vault to the respective handholes and grout the conduits into the vault to prevent water and mud from entering the handholes. The cost of this

work shall be considered incidental to AR110610: Electrical Handhole pay item.

#### METHOD OF MEASUREMENT

110610-4.1. The number of electrical handholes to be paid for shall be the number of structures constructed in place and accepted by the Engineer.

#### BASIS OF PAYMENT

110610-5.1. Payment will be made at the contract unit price bid for each electrical handhole completed and in place. This price shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling, and placing of the materials; for all coring and labor associated with conduit, duct, cable in unit duct, and/or cable entries; and for all labor, equipment, tools, and incidentals necessary to complete the structure.

Payment will be made under:

Item AR110610 Electrical Handhole - per Each.

**END OF ITEM 110610**

**DIVISION VII – AUTOMATED WEATHER OBSERVING SYSTEM**

**ITEM AR801251  
REMOVAL OF EXISTING WEATHER OBSERVING EQUIPMENT**

DESCRIPTION

801251-1.1 This Item shall consist of the removal of the existing DigiWx weather observing system currently in place at the Greenville Airport. This Item shall also include the removal of all existing foundations and footings in place supporting existing equipment.

All materials and equipment shall remain the property of the Greenville Airport. The Contractor shall be responsible for placement of all equipment to a location on Airport property designated by the Airport Manager. In the event that the Owner does not want the existing materials and equipment, the Contractor shall dispose of the respective materials in a legal manner off airport property.

In locations where existing footings or foundations are removed, the Contractor shall backfill the location with compacted CA-6 aggregate.

BASIS OF PAYMENT

801251-5.1 Payment shall be made under:

Item AR801251 Removal of Existing Weather Observation Equipment – per Lump Sum.

**ITEM AR801252  
AWOS-II, INSTALLED**

DESCRIPTION

801252-1.1 This Item shall consist of a complete turnkey installation of an FAA-approved Automated Weather Observing System, AWOS-II with Graphic Weather Display and NADIN (National Airspace Data Interchange Network) linking/connection/interface equipment, in accordance with these Special Provisions and the documents listed below. The system shall be installed at the specified locations and in accordance with the dimensions and details shown in the Plans. The term “turnkey” shall mean that the Contractor is responsible for the installation of the AWOS system, including review of the Plans for suitability with proposed equipment, coordination and recommendations on site preparation, processing of paperwork and approvals required, installation, calibration and start up of AWOS equipment, maintenance training of Airport personnel, spare parts, warranties, remote maintenance and repair monitoring, certification and other items as necessary for the complete, operational and FAA-commissioned AWOS system.



The AWOS manufacturer shall utilize an established and proven equipment configuration. The above description shall not be construed as being all inclusive or restrictive.

All equipment must be installed in compliance with applicable FCC licenses. Any modifications, including labor, materials and incidental items required to accommodate the above specified equipment are included in Item 801252 and no additional compensation will be allowed.

The Contractor shall determine that all AWOS components furnished (including the FAA approved equipment) are compatible in all respects with each other and also with any possible remaining components of the existing system. Any incompatible components furnished by the Contractor shall be replaced (at their own cost) with an equivalent unit, approved by the Resident Engineer that is compatible with the remaining existing equipment.

#### 801252-1.2 REFERENCES.

- A. FAA AC 70/7460-1L, “Obstruction Marking and Lighting with Change 2”
- B. FAA AC 150/5220-16E, “Automated Weather Observing Systems (AWOS) for Non-Federal Applications – with Change 1”
- C. FAA AC No 150/5345D, “Airport Lighting Equipment Certification Program”
- D. FAA AC No. 150/5370-2G, “Operational Safety on Airports During Construction”
- E. NFPA 70 – National Electrical Code (NEC), most current issue in force
- F. NFPA 70E – Standard for Electrical Safety in the Workplace.
- G. OSHA 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures.
- H. UL Standard 6 – Rigid Metal Conduit.
- I. UL Standard 514B – Conduit, Tubing and Cable Fittings.

801252-1.3 SHOP DRAWINGS. The Contractor shall furnish shop drawings for approval before ordering equipment and/or materials. Shop drawings are required for airfield lighting equipment and materials to be used on the project. **Shop drawings shall be clear and legible. Copies that are illegible will be rejected.** Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus 4 copies to be retained by the Project Engineer. Shop drawings shall include the following information:

- A. **Certification of compliance with the AIP (Airport Improvement Program) Buy American Preferences for all materials and equipment. Do not submit ARRA (American Recovery and Reinvestment Act) certification as a substitute for certification of compliance with**

**the AIP Buy American Preferences. Shop drawings submitted without certification of compliance with the Airport Improvement Program Buy American Preferences or without certification of manufacture in the United States of America in accordance with the AIP Buy American Requirements will be rejected. See the FAA website at: [http://www.faa.gov/airports/aip/buy\\_american/](http://www.faa.gov/airports/aip/buy_american/) for more information on the AIP Buy American Preferences requirements. FAA approved equipment that is on the FAA Buy American Conformance List or the list of Nationwide Buy American Waivers Issued by the FAA complies with the AIP Buy American Preferences and will not require additional waiver paperwork for AIP projects. See the FAA website at: [http://www.faa.gov/airports/aip/buy\\_american/media/nationwideBuyAmericanWaiversIssued.pdf](http://www.faa.gov/airports/aip/buy_american/media/nationwideBuyAmericanWaiversIssued.pdf) for a list of Nationwide Buy American Waivers Issued by the FAA.**

- B. In order to expedite the shop drawing review, inspection and/or testing of materials and equipment, the Contractor shall furnish complete statements to the Project Engineer as to the origin and manufacturer of all materials and equipment 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 and equipment.
- C. AWOS Submittal Package.
- D. Concrete mix design.
- E. Provide cut sheets with manufacturer's name, catalog number, dimensions, material and UL listing for each type and size ground rod. Include certification of 100% domestic steel for ground rods. Include cut sheets for exothermic weld connections, ground lugs, and ground wire.
- F. Provide cut sheets for all types of conduit used for the AWOS (for example: galvanized rigid steel conduit). Include certification that steel conduits are made with 100 percent domestic steel.
- G. Submittals for panelboards shall include manufacturer, catalog numbers, panel schedule, voltage and amperage rating, bus material, integrated short circuit ampere rating, circuit breaker arrangement and sizes and respective enclosure.
- H. Provide cut sheets for the power and control circuit conductors.
- I. Cut sheets with part number and specifications for the AC surge suppressor.

801252-1.4 AWOS MANUALS. Two complete sets of operation, maintenance, and repair manuals shall be provided to the Airport. These hard copies shall either be bound or in a 3-ring binder. Digital copies of all manuals shall also be provided on a thumb drive or similar digital storage device.

801252-1.5 SITE PREPARATION. This work includes all labor, equipment and material required to provide, power and transmit the control and data signals from the AWOS site to the respective AWOS broadcasting system, to any and all necessary transmitters and to the operator terminal and displays. This work includes, but is not limited to, the following:

- A. General AWOS site work including grading, installing and leveling of crushed stone, landscaping, seeding, mulching as specified or as shown on the Plans.
- B. Furnishing and installing a 120/240 VAC, 60-amp, 3-wire, single phase electric feed from the power source to the AWOS panelboard as detailed on the Plans. Furnishing and installing power to the AWOS panelboard to remote sensor locations, obstructions lighting on the tower, convenience receptacle, uninterruptible power system, and other associated AWOS items as required. All branch circuits running from the distribution panel to the respective AWOS equipment shall be in galvanized rigid steel conduit (GRSC) and/or sunlight resistant, UL listed liquid tight flexible metal conduit, listed suitable for grounding and conforming to 2020 NEC Article 350. This includes furnishing the power distribution panel with breakers, all power cable, conduit, grounding and lighting protection, mounting channels or posts, hardware, etc. Should power requirements of the proposed AWOS equipment exceed the specified power, it will be supplied as per manufacturer's specifications and recommendations. The Contractor shall provide the Resident Engineer with these specifications and recommendations.
- C. Furnishing and installing a UHF communications link between the AWOS site and the Terminal Building, as detailed in the Plans and as specified herein.
- D. Furnishing and installing control and data cables in conduit from the AWOS ACU (Acquisition Control Unit) to remote sensors.
- E. Furnishing and installing a VHF radio link to broadcast the AWOS information.
- F. Construction of foundations for the tower base, mounting/support structure for AWOS control panels/AWOS distribution panel/UPS/Battery/tower cradle and other AWOS equipment, and all sensors as applicable.
- G. Construction of a rock area for the AWOS site as shown on the Plans.
- H. Construction of a permanent true North marker, as shown on the Plans.
- I. Furnishing and erection of a self-supporting free standing tower as shown on the Plans in accordance with FAA AC 150/5220-16E and the respective AWOS manufacturer certification requirements.
- J. Accomplishing all required utility installations and connections.
- K. Obtaining all required licenses, permits and certification in order to build and commission the AWOS.

- L. Licensing of the VHF frequency for broadcasting the AWOS information is the responsibility of the Contractor. No additional compensation will be allowed for this effort.
- M. Furnishing and installing a dedicated 120 VAC, 20 Amp branch circuit for the AWOS equipment to be installed at the Terminal Building. Contractor shall furnish and install a 20 Amp, 125 Volt, duplex, NEMA configuration 5-20R specification grade receptacle with Cast FS box (for surface mount) or sheet metal box (for flush mount in wall), and cover plate with branch circuit wiring and conduit from the respective power source to the location of the AWOS equipment. The AWOS monitor will be located on the office area of the Terminal Building as designated by the Airport Manager. Branch circuit wiring shall be 1 #12 THWN, 1 #12 THWN Neutral, 1 #12 ground in 1/2-inch or 3/4-inch galvanized rigid steel conduit with threaded fittings or electrical metallic tubing with compression fittings. Contractor shall furnish and install a 20 Amp, 120 VAC, branch circuit breaker with 10,000 AIC minimum at 120 VAC that is compatible with the existing panelboard or load center designated as an available 120 VAC power source. Contractor shall field verify available 120 VAC power source panel.

The above work may be performed by the AWOS manufacturer's representative or an approved contractor regularly engaged in work of this type.

801252-1.6 AWOS INSTALLATION. This work includes all labor, equipment, and material required to install and make operational the AWOS equipment, data acquisition, data broadcasting, and data displays. Included in this work shall be the training of airport personnel as described herein, providing spare parts, and additional items required to provide a fully operational and FAA-commissioned AWOS for the airport.

This work shall be performed by the AWOS manufacturer or an approved Contractor regularly engaged in work of this type, and shall include furnishing and installing the equipment, calibration, start-up, and certification of equipment.

Sensors shall be installed at the locations and elevations shown in the Plans or alternative locations recommended by the manufacturer and approved by the Engineer. All connections of the cables to the sensors, data collection, processing unit, and data terminal will be in accordance with the manufacturer's specifications.

The following output media shall be provided:

- A. Voice output transmitted via VHF equipment.
- B. Telephone dial-up access to voice output.
- C. The AWOS shall include a Graphical Weather Display to deliver real-time and historical AWOS data to airport personnel and users in a comprehensive, easy-to-read format. It

should also allow the AWOS display information to be viewed through a web browser. The Graphical Weather Display shall include at a minimum a video display monitor, keyboard and optional printer which are all to be located in the Airport Terminal Building.

- D. Telephone to voice broadcasts.
- E. Computer hook-up.
- F. Audio monitor amp/speaker with volume control and on/off switch or radio receiver for monitoring the AWOS information.

801252-1.7 AWOS SERVICES. In addition to supplying and installing the aforementioned equipment, the AWOS Contractor/ Manufacturer shall provide the following services and equipment:

- A. Assist the Consultant, the Airport Sponsor, and the Illinois Division of Aeronautics to obtain all required licenses, permits, and certificates in order to FAA commission the AWOS system.
- B. Conduct all required systems performance tests.
- C. Participate in FAA ground check, and site commissioning of the AWOS. This includes providing a qualified technician to be on site for the FAA ground of the AWOS and properly broadcasting the information in accordance with FCC rules and regulations.
- D. Prepare the AWOS for the FAA ground check. Place and keep the AWOS in an operational test mode until such time as it is FAA-certified. If the FAA disapproves either the ground check or flight check, the Contractor/Manufacturer shall further prepare the AWOS to pass the check.
- E. Post certificates and notices outlined in AC 150/5220-16E.
- F. Provide operational training that provides system overview. Include two complete sets of operation and user manuals, for designated airport operational and technical personnel.
- G. Provide manufacturer's standard recommended spare parts.
- H. Provide, if needed, access codes or passwords unique to the airport in order to perform technician level adjustments and calibration.
- H. All work shall be completed in accordance with these Special Provisions, the construction Plans, AC 150/5220-16E (or most current issue in effect), and FAA Order 6560.20C.

#### EQUIPMENT AND MATERIALS

### 801252-2.1 GENERAL.

- A. The AWOS and other equipment and material covered by FAA specifications shall have the approval of the Federal Aviation Administration. Refer to the List of Certified Non-Federal AWOS Systems and Manufacturers as of January 10, 2022. Confirm FAA certification of the respective AWOS with the respective manufacturer.
- B. All other equipment and materials covered by other referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification.

### 801252-2.2 SITE EQUIPMENT AND MATERIALS.

- A. Structural Concrete: Concrete shall be in accordance with Item 610 Structural Portland Cement Concrete unless higher strengths are recommended by the equipment manufacturer.
- B. Power and Communications Cable: Power and communication cable shall be in accordance with Item 108, as detailed in the Plans, in accordance with the respective AWOS manufacturer's recommendations and/or requirements and as detailed herein.
- C. Underground Electrical Duct: Underground electrical duct shall be in accordance with Item 110 as detailed in the Plans, and as detailed herein.
- D. Safety Switches: Safety switches shall be heavy duty, UL-listed, with amperage, voltage, number of poles, and type (fusible or not fusible), and accessories as detailed in the Plans. Safety switches shall be pad lockable in the off position. Include ground lugs or grounding kits with all safety switches. Safety switches located outdoors, or in damp areas shall be in NEMA 4X stainless steel enclosures. Safety switches located in hazardous classified areas shall be UL-listed or FM approved as suitable for the respective location. Safety switches shall be as manufactured by Square D, Eaton Cutler-Hammer, or equivalent. Safety switches shall be manufactured in the United States to comply with the AIP Buy American Preference requirements.
- E. Power Distribution Block: Power distribution block to connect/splice the AC Surge Protector to the feeder circuit shall be as detailed in the Plans. Enclosure shall be NEMA 4X stainless steel adequately sized for the terminals, conduits, and wiring in accordance with National Electrical Code Article 314 and/or as detailed in the Plans.
- F. Surge Protective Device for AWOS Site: AC power surge protective device shall be UL-listed per UL 1449, Third Edition. AC power surge protective device for the AWOS distribution panel shall be suitable for a 120/240 VAC, 1-phase, 3-wire, plus ground system with a surge current rating of 240,000-Amps, 8 x 20 microsecond wave per mode (L-L, L-N, L-G, N-G), and status indication lights in a NEMA 4X stainless steel enclosure, Lightning Protection Corporation Model LPC 2020-8U-G, or approved equal. Include six spare indicator lamps with each AC power surge protective device.

- G. AWOS Distribution Panelboard: Each circuit breaker panelboard shall be rated 120/240 VAC, 1 phase, 3-wire and shall have Copper bus structure braced for 10,000 RMS Amperes fault current minimum at 120/240 VAC. All copper parts shall be plated to prevent corrosion. Panelboards shall bear the UL label. Panelboards for service entrance applications shall be UL-listed suitable for service entrance. All panelboards shall be dead-front safety-type, equipped with thermal magnetic-molded case breakers and solid neutral bus. Bus bar connections to the branch circuit breakers shall be the "Distributed Phase" or "Phase Sequence" type. Bussing shall be such that adjacent single-pole breakers will be on different phases or polarities, and that two pole breakers can be installed at any location. Panelboard numbering shall be such that starting at the top, odd numbers shall be used in sequence down the left hand side, and even numbers shall be used in sequence down the right hand side. Enclosure shall be rated NEMA 3R and 12 suitable for outdoor installation with a hinged cover. Provide a circuit directory frame and card with a clear plastic covering on the inside of the doors. Fronts shall have flush locks and shall be furnished with two keys per lock. Provide circuit breakers, quick-make, quick-break, thermal-magnetic, trip indicating, and common trip on all multi-pole breakers. Handles shall have "ON", "OFF" and "TRIPPED" positions. Circuit breakers shall be UL-listed in accordance with UL Standard 489. Breakers shall have bolt-on connections to the bus. Amperage trip ratings, voltage ratings, interrupting current ratings, and number of poles shall be as shown on the panelboard schedules. Contractor shall confirm and adjust circuit breaker sizes, as required for the respective equipment or device being fed, in accordance with the respective equipment manufacturer's recommendation and the NEC. Panelboards shall be furnished with copper-ground bus and separate insulated neutral bus.
- H. Ground Rods: Ground rods for the AWOS ground ring shall be 3/4-inch diameter, 10-foot long (minimum), UL-listed, copper-clad. Ground rods shall have 10 mils minimum copper coating. Ground rods shall be manufactured in the United States of America. Steel used to manufacture ground rods shall be 100 percent domestic steel. Connections to ground rods shall be exothermic weld type as detailed in the Plans and as specified herein. Ground ring conductors, grounding electrode conductors, bonding jumpers, lightning protection conductors, ground wires, and other grounding conductors shall be as detailed in the Plans and specified herein.
- I. Fencing. Fencing for the AWOS site will be a separate pay item and shall be in accordance with Item 162 and as detailed in the Plans.
- J. Stone. Stone shall conform to Item 209, and as detailed in the Plans.

### 801252-2.3 AWOS EQUIPMENT AND MATERIALS.

801252-2.3.1 AWOS SYSTEM. The Automated Weather Observing System (AWOS) shall be an FAA Certified Non-Federal AWOS II system in accordance with Advisory Circular No. 150/5220-16E and Order No. 6560.20 (latest edition) prior to bid opening. Refer to List of Certified Non-Federal AWOS Systems and Manufacturers as of January 10, 2022. (**See Attachment A**). Confirm FAA certification of the respective AWOS with the respective manufacturer. All Weather, Inc., Optical Scientific, Inc. (formerly Belfort Instrument Company),



Mesotech International, and DBT Transportation Services, LLC (formerly Vaisala, Inc.) are listed as Certified Non-Federal AWOS II manufacturers in the January 10, 2022 List.

#### 801252-2.3.2 GENERAL PERFORMANCE STANDARDS.

A. Input Power: AWOS equipment shall operate from a 120/208 VAC ( $\pm 10\%$ ), 60 Hz ( $\pm 5$  Hz), 3-wire single-phase source. The maximum service required shall be 30 amps. The AWOS enclosure shall be mounted in accordance with the manufacturer's specifications.

B. Loss of power: The AWOS should return to normal operation without human intervention after a power outage. When power is restored, the AWOS should not output erroneous data. The system shall have the capability of operating from an Uninterruptible Power Supply (UPS) should one be required.

801252-2.3.3 OPERATING ENVIRONMENT. All AWOS equipment shall meet the requirements for operating in a Class 1 environment, as defined by AC 150/5220-16 (latest edition).

801252-2.3.4 AWOS SYSTEM AND SENSOR SPECIFICATIONS. The AWOS II provided for this project shall meet the specifications and performance guidelines defined in AC 150/5220-16E. The AWOS shall include the following weather monitoring instruments and sensors and shall meet the respective specifications contained in FAA AC 150/5220-16E (latest edition in effect), and as detailed herein:

- A. Altimeter Sensor
- B. Wind Direction Sensor
- C. Wind Speed Sensor
- D. Ambient Temperature Sensor
- E. Dewpoint Sensor
- F. Density Altitude
- G. Airport Identifier
- H. Visibility Sensor

#### 801252-2.3.5 AWOS DATA PROCESSOR.

- A. The AWOS data processor shall perform the following functions: data acceptance, data reduction, data processing, and product dissemination (digital and voice).
- B. The processor shall provide a computer-generated voice weather observation to a ground-to-air radio (VOR, NDB, or VHF discrete) for transmission to pilots.
- C. The processor shall have the capability to process observations from an unlimited number of sensors.
- D. The data reduction function shall consist of the processing of information prior to the actual algorithm processing. The AWOS data reduction software shall include quality



control checks to ensure that the data received is accurate and complete and that the associated equipment is working properly before the weather algorithms are performed. If data from any sensor is erroneous or missing, (e.g., a sensor loses power, etc.), that parameter and all other parameters derived from the missing parameter shall be reported "missing" in the weather observation. The processor shall continue to sample data, and if the error condition is corrected, the weather parameter shall be reinserted in the AWOS report.

1. The processor shall periodically check reference or calibration points which correspond to the normal operating limits of the sensor.
2. The processor shall set upper and lower limits on the sensor output which correspond to the normal operating limits of the sensor.

#### 801252-2.3.6 OPERATOR TERMINAL.

- A. The operator terminal shall have the capability to do product editing. This function allows an authorized observer to initiate or change any observation product. A specific "editing" password shall control access to this function. Manual entries of weather phenomena not automatically observed shall be placed in the remarks section of the observation and will not be included in the voice message. In the case of sensor failure or an incorrect AWOS output, an operator shall have the capability to replace the incorrect parameter value with a missing symbol.
- B. The operator terminal shall consist of a video display monitor with keyboard, printer, and audio speaker at the terminal building. The contractor/manufacturer shall provide all necessary interface equipment, video display monitor, keyboard, printer and audio speaker. The audio speaker shall be provided with an on/off switch and volume control.
- C. The system shall require the operator to enter a security code in response to system queries prior to allowing him/her to proceed with data entry.
- D. Where an operator terminal is used to modify the report, all manually entered data shall be automatically time tagged by the system. The data shall be valid until the next hourly or manually entered observation. In order to retain the manually entered data in the system, the operator shall be required to re-validate his/her entries hourly. The data shall be retained in the observation until the next timed observation, when it must be re-validated.

#### 801252-2.3.7 VOICE SUBSYSTEM.

- A. The voice subsystem shall provide high quality, computer-generated speech for output of the AWOS observation. A high-level error-checking scheme shall be incorporated to prevent erroneous outputs. The voice subsystem should also provide the speech for the local ground-air radio broadcast and for telephone dial-up users. The system shall have the capability of hooking up to a minimum of two (2) phone lines.
- B. The voice subsystem shall have the capability for the addition of a manually input voice message. This message will be voiced at the end of the computer-generated voice message.

The programming of the manual input voice message shall be accomplished using a telephone type handset. The system shall have the capability of remotely programming a voice message via telephone. A security access code shall prevent unauthorized use. The system shall automatically play back the recorded message and allow the user to reprogram, delete, or accept the message.

C. The voice subsystem shall have the following features:

1. The voice signal shall deliver a minimum of 1 milliwatt of power into a balanced 600 ohm line. The output amplitude shall be adjustable to nominal 0 db.
2. The voice message shall be output continuously with approximately a 5 second delay between the completion of one message and the beginning of the next.
3. If the voice message is in process of output when the new AWOS observation is received, the output message should be completed without interruption; voice transmission of the new AWOS observation should begin upon completion of the next delay time.
4. The quality of the automated speech shall provide clear reception from telephone and ground-air radio transmitters.
5. The format and sequence of the voice message shall be in accordance with FAA Order 7110.10, Flight Service Handbook. When any weather parameter is reported missing "MSG" due to a disabled or inoperative sensor, as determined by internal AWOS checks, the voice report shall be "(parameter) missing", e.g., "wind speed missing", "cloud height missing", etc. The UTC time of the observation will be given after the location identification.
6. If a valid data update is not received prior to the start of the next voice transmission, the last valid data set received shall be used to compose the voice message. Failure to receive a data update for more than five minutes shall result in the termination of the voice output and generation of a failure message. In this event, the AWOS shall output the message "(station identification) automated weather observing system temporarily inoperative.
7. The system shall contain an automatic telephone answering device that will permit the user access to the voice message via the public telephone system. The incoming call shall be answered prior to completion of the second ring, and the audio signal in progress at the time the call is received shall be placed on line. The voice subsystem shall automatically disconnect when the weather observation has been completely transmitted twice.
8. Hook-up for telephone audio output on an assigned dial-up telephone number shall be provided by others. The phone line and hook-up for AWOS data communication is to be terminated at the AWOS tower.
9. The system shall contain a handset or audio speaker for monitoring the voice output from the operator terminal.
10. The AWOS telephone answering device, as supplied to the Owner, shall have the capability to answer a single phone line. The AWOS shall be equipped to answer a second phone line without the addition of any components to the Voice Subsystem.

801252-2.4 VHF TRANSMITTER. The AWOS output will be broadcast via a separate VHF transmitter. The transmitter operates in the 118-136 MHz band. The transmitter shall broadcast from the AWOS site and must have an FCC type acceptance and have the following operational parameters:

- A. Channel Spacing: 25 KHz.
- B. RF Power Output: Nominal 2.5 watts, at the transmitter 10 watts maximum.
- C. Frequency Stability:  $\pm 0.001\%$  (-30 to +60 degrees C).
- D. Emission Type: 6K00A3E.
- E. Spurious and Harmonic Emissions: 80 db minimum up to 90% modulation.

801252-2.5 EQUIPMENT ENCLOSURE. AWOS components not designed for outdoor use shall be located in an indoor area as directed by the Airport Manager and in accordance with manufacturer and FAA guidelines. Components used outdoors that are not weatherproof shall be located in a weatherproof enclosure. All outdoor enclosures shall be NEMA 4 Stainless Steel or Aluminum enclosures. All outdoor hardware shall be corrosion resistant stainless steel.

801252-2.6 CONCRETE. Concrete shall be in accordance with Item 610 Structural Portland Cement Concrete, unless higher strengths are recommended by the equipment manufacturer.

801252-2.7 REINFORCING STEEL. Reinforcing steel and bars shall be used in the tower and sensor foundations. AWOS manufacturers shall submit foundation drawings showing the use of these materials in the foundations. Reinforcing steel and wire fabric shall be sized in accordance with the respective AWOS equipment manufacturer's recommendation for each respective foundation. Reinforcement shall conform to the requirements of Item 610 Structural Portland Cement Concrete, and/or as recommended by the respective AWOS manufacturer for their equipment foundations. Reinforcing steel bars shall conform to the requirements of ASTM A 706, Grade 60; welded wire fabric shall conform to the requirements of AASHTO M 55, ASTM A82, or ASTM A185, plain type, flat stock only.

801252-2.8 CONDUIT. Conduit shall be used between the AWOS tower and sensor foundation(s) for both power and signal cables. Conduit used for power and signal cables shall be galvanized rigid steel conduit with UL listed liquid tight flexible metal conduit at final connections to devices. All liquid tight flexible metal conduits shall include an external bonding jumper per the requirements of FAA STD 019e section 4.2.10.3. This bonding jumper shall be a #6 AWG stranded copper conductor. The bonding jumper shall terminate on approved grounding fittings at each end of the flexible metal conduit. Conduit used for grounding electrode conductors, lightning protection conductors, and/or individual ground wires shall be Schedule 40 or Schedule 80 PVC. The conduit shall meet the requirements of these specifications, Item 110, manufacturer's recommendations, and the National Electric Code (NEC). Refer to Item 110 for additional information and requirements on conduits and ducts.

801252-2.9 WIRE AND CONTROL CABLE. Wire and control cables shall meet the requirements of Item 108, the National Electrical Code, the AWOS equipment manufacturer's recommendations, as detailed in the Plans and as specified herein. Control and/or communication cables shall be the manufacturer's required number of pairs plus a minimum two spare pairs. All

communication cables are to be individually shielded and suitable for direct earth burial. Refer to Item 110 for additional information and requirements on wire and cables.

801252-2.10 AWOS DATA LINK. The AWOS shall utilize a UHF radio data link for transmitting AWOS data to the operator terminal at the Airport's Terminal Building.

801252-2.11 UNINTERRUPTIBLE POWER SUPPLY. The Contractor shall provide a UPS (Uninterruptible Power Supply) to regulate power and provide a back-up power supply source for power outages. The UPS shall be capable of powering the AWOS for a minimum of one (1) hour.

801252-2.12 TOWER. Rohn 55FK self-supporting fold-over tower or approved equivalent shall be used. The tower shall not exceed the height specified in the project or manufacturer's drawings. The tower shall conform to all AWOS manufacturer's specifications. The tower shall be painted with a six-band marking with alternating bands of aviation surface orange (the top band) and white. The band widths shall be 1/6 of the height of the tower and perpendicular to the vertical axis of the tower. Paint and aviation colors referred to in the specifications should conform to Federal Standards FED-STD-595, Colors are Orange Number 12197 (Aviation Surface Orange), and white Number 17875 (Aviation White). The tower shall be primed in accordance with the manufacturer's specifications prior to painting.

801252-2.13 OBSTRUCTION LIGHTS. A Dual L-810(L) obstruction light shall be placed within 5 feet of the top of the tower in accordance with FAA requirements and the manufacturer's plans and specifications. Obstruction lights shall be FAA Type L-810(L) steady burning red obstruction light with Light Emitting Diode illumination meeting FAA AC 150/5345-43J and shall be on the current list of FAA-approved equipment noted in FAA AC150/5345-53D, or latest revision. The two lamps on the L-810 shall be wired in parallel on a dedicated circuit.

801252-2.14 TRANSIENT AND LIGHTNING PROTECTION. AWOS equipment should be protected against damage or operational upset due to lightning-induced surges on all sensor input lines, sensor supply lines, and incoming power and data communications lines. Equipment (including electrical circuits and fiber optics modems) and personnel shall be protected from lightning surges and voltages, from power line transients and surges, and from other electromagnetic fields and charges. Lightning protection systems shall be designed and installed in accordance with the Lightning Protection Code, NFPA 780, and the manufacturer's recommendations for all equipment structures.

801252-2.15 WMSCR INTERFACE. The AWOS shall be capable of interfacing to the equipment of a vendor that is approved to download information into the Weather Message Switching Center Replacement (WMSCR).

801252-2.16 TEST EQUIPMENT. The Contractor shall supply the Owner with the necessary test equipment to maintain the AWOS weather sensors according to the manufacturer's FAA

approved maintenance plan. This test equipment includes all standards as specified in the AWOS manufacturer's Operation and Maintenance Manual.

801252-2.17 SPARE COMPONENTS. The Contractor shall provide the Owner with the manufacturer's minimum recommended spare components necessary to restore the AWOS to service following a malfunction.

### CONSTRUCTION METHODS

801252-3.1 GENERAL. The AWOS layout shown in the Plans is provided for guidance purposes. The Contractor shall submit a system layout according to the manufacturer's recommendations for approval to the Project Engineer prior to issuance of a Notice to Proceed. The Contractor shall furnish and install all materials necessary for complete and operational installation of the AWOS and associated equipment and materials, as specified herein and as shown in the Plans. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the NFPA 70 - National Electrical Code (NEC) most current issue in force, and all other applicable local codes, laws, ordinances, and requirements in force. Equipment shall be installed in conformance with the respective manufacturer's directions and recommendations for the respective application. Any installations which void the UL listing, ETL listing (or other third party listing), and/or the manufacturer's warranty of a device will not be permitted.

- A. The Contractor shall keep a copy of the latest NEC in force on site at all times during construction for use as a reference.
- B. The Contractor shall keep a copy of the Plans, Special Provision Specifications including any addenda, and copies of any change orders on site at all times during construction.
- C. Contractor shall coordinate work and any power outages with the Airport Manager and the Resident Engineer/Resident Project Representative. Any shut down of existing systems shall be scheduled with and approved by the Airport Manager prior to shut down. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow U.S. Department of Labor Occupational Safety & Health Administration (OSHA) 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures including, but not limited to, 29 CFR section 1910.147 The Control of Hazardous Energy (lockout/tagout).
- D. The Contractor shall comply with the requirements of FAA AC No. 150/5370-2G (or most current issue) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- E. The Contractor shall comply with the applicable requirements of NFPA 70E - Standard for Electrical Safety in the Workplace.
- F. All temporary installations shall comply with National Electrical Code Article 590 - "Temporary Installations." The Contractor shall secure, identify, and place temporary

exposed wiring in conduit, duct, or unit duct to prevent electrocution and fire ignition sources in conformance with the requirements of FAA AC 150/5370-2G, Part 218, Paragraph c.

- G. All electrical equipment installed by the Contractor shall be properly labeled, and all cables must be tagged.
- H. All power and control cables shall be installed in conduit, wireways, pull boxes, junction boxes, or raceways. No exposed power or control wiring will be permitted.
- I. Locate Existing Underground Utilities and Cables. The location, size, and type of material of existing underground and/or aboveground utilities indicated in the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans, and shall obtain, from the respective utility companies, detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment, where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer/Resident Project Representative shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility. **Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123.** Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact the Airport Manager for assistance in locating underground Airport Cables and utilities. Also, coordinate work with above ground utilities.
- J. Contractor shall comply with the requirements of FAA AC No. 150/5730-2G (or most current) "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION."
- K. Secure, identify and place any temporary exposed wiring in conduit to prevent electrocution and fire ignition sources.

801252-3.2 SITE PREPARATION. All required grading, clearing, concrete foundation construction, trenching, cabling, and other preparations, except that to be paid for elsewhere in the Standard Specifications and Special Provisions, will be considered incidental to the contract with no additional compensation allowed.

801252-3.3 UTILITY CONNECTIONS. All required power and communications utility installations and connections shall be the responsibility of and coordinated by the Contractor.

The Contractor shall also coordinate the new telephone service with the Airport Manager. **The respective Owner shall pay for all associated electric utility and/or telephone utility company charges required to provide telephone service for the AWOS. The Contractor is not responsible for telephone utility charges associated with the proposed telephone service for the AWOS.** Utilities and their connection location will be accomplished in accordance with the plan details and the respective serving utility company's requirements. This includes providing telephone service for the automatic answering device, or other equipment requiring a phone line, or lines, to the location(s) required by the particular system installed, and the proper connection of same. Any utility charges or fees associated with utility connections/services shall be billed to the Owner. All labor and materials required for utility services shall be the responsibility of the Contractor and shall be included in the lump sum price for the AWOS II, Installed.

801252-3.4 POWER AND COMMUNICATIONS. Power and communications lines shall be installed in accordance with Items 108 and 110 and as detailed in the Plans.

801252-3.5 TOWER AND SENSOR BASES. The Contractor shall submit detailed shop drawings of the tower and sensor bases shown in the Plans for the approval of the Project Engineer prior to issuance of a Notice to Proceed. All bases shall be constructed with Item 610 Concrete Structural Portland Cement. Base construction, including, but not limited to, excavation, forming, concrete placement, setting of miscellaneous steel, and curing, shall be considered incidental to the Contract and no additional compensation will be made.

801252-3.6 WIND SENSOR TOWER. The wind sensor tower shall be installed in accordance with the manufacturer's specifications AC 150/5220-16E (or latest issue in effect) and FAA Order 6560.20B. The wind sensor tower shall be 30 feet or 10 meters in height (as applicable) in accordance with the respective AWOS manufacturer recommendations and requirements and as detailed in the Plans. The Contractor shall submit detailed shop drawings of the wind sensor tower to the Project Engineer for approval prior to issuance of the Notice to Proceed.

801252-3.7 AWOS SENSORS. AWOS sensors shall be installed in accordance with manufacturer's specifications, recommendations and requirements, FAA AC 150/5220-16E (or latest issue in effect) and FAA Order 6560.20B.

801252-3.8 INSTALLATION OF POWER DISTRIBUTION EQUIPMENT AND MATERIALS.

A. Installation of Safety Switches. All safety switches shall be provided with appropriate mounting hardware and strut support. Strut support shall be stainless steel, Unistrut P-1000-SS, or approved equal. All hardware shall be corrosion-resistant stainless steel. Mount safety switches securely in accordance with the manufacturer's recommendations/instructions and as required for the respective application. Inspect all safety switches for proper operation, tight and secure connections, and correctness. All safety switch enclosures shall be bonded to ground with a ground lug or bar and ground wire. Field cut holes in safety switch enclosures to accommodate conduit entrances. Where safety switches are provided with concentric knockouts, and the respective conduit does not use the largest knockout, install a grounding

bushing with ground wire connections between the bushing and the ground bus. Do not use safety switch enclosures for a splice box or for a pull box. Do not route control wires or other circuit wiring through a safety switch. Where splices are required or other control circuit wires are installed in the respective conduit to a safety switch, provide a separate junction box to accommodate the splices and/or other circuit conductors. Provide NEMA 4 hubs for all conduit entries into safety switch enclosures that are rated NEMA 4, 4X to maintain NEMA 4, 4X rating. Provide fuses for fusible safety switches, as detailed in the Plans. Provide weatherproof, abrasion-resistant, engraved legend plates for each safety switch noting the device served, the voltage system, and the fuse size.

- B. Surge Arrester Installation. Install Surge Protector Devices (SPD) in conformance with the respective manufacturer's directions and recommendations and as detailed in the Plans. The Contractor shall confirm all connections to the surge arrester (phases, neutral, and ground) are completed and secure. Connection leads to the surge arrester shall be sized per the respective manufacturer's recommendation and as detailed herein, and shall be maintained as short as possible, maximum 2 feet in length, and laced together for mutual coupling. Provide NEMA 4 hubs for all conduit entries into NEMA 4, 4X rated enclosures that are rated NEMA 4, 4X to maintain NEMA 4, 4X rating. The conduit or conduit nipple connecting the SPD enclosure to the panel enclosure shall be sealed with duct seal or other nonflammable medium to prevent soot from entering the enclosure in the event of a SPD device failure. Surge Protector Devices shall be provided with appropriate mounting hardware and strut support. Strut support shall be stainless steel, Unistrut P-1000-SS, or approved equal. All hardware shall be corrosion-resistant stainless steel.
  
- D. Installation of Panelboards. Panelboards shall be thoroughly inspected for physical damage, proper alignment, anchorage, and grounding. The exterior finish shall be inspected for blemishes, nicks, and bare spots, and touched up as required using matching touch-up paint. Inspections shall be made for proper installation and tightness of connections for circuit breakers. Panelboards shall be provided with appropriate mounting hardware and strut support. Strut support shall be stainless steel, Unistrut P-1000-SS, or approved equal. All hardware shall be corrosion-resistant stainless steel. Install panelboards as shown in the Plans and in accordance with NEMA PB1.1. Install panelboards plumb. Install circuit breakers in panelboards and/or load centers in conformance with the respective manufacturer's directions. Connect only one wire/cable to each breaker terminal. Provide filler plates for unused spaces in load centers. Provide typed circuit directory to identify each branch circuit in the load center/panelboard. Revise directory to reflect circuiting changes as required. Provide legend plates for all panelboards to identify the area and/or equipment controlled by the panel, the power source, and the voltage system. Legend plates shall be weatherproof and abrasion resistant phenolic material. Lettering shall be black on white background. Panelboards shall be thoroughly tested after installation and connection to respective loads. Include support hardware as detailed in the Plans and/or in accordance with the respective AWOS manufacturer's recommendations and requirements.
  
- D. Installation of Pull and Junction Boxes. The Contractor shall coordinate the installation of pull and junction boxes for each respective facility. Boxes shall be sized and suitable for the respective application:



1. Pull or junction boxes surface mounted at exterior locations or interior damp location shall be "standoff" mounted ½-in. from the wall in a manner to promote air circulation completely around the box. Provide stainless steel strut supports and hardware for mounting pull and junction boxes.
2. Any damage to pull or junction boxes shall be immediately repaired or replaced to the satisfaction of the Resident Engineer.
3. Protect all boxes from entry of foreign materials. Clean out metal shavings, scrap wire, dirt, and debris from each junction or pull box.
4. Provide NEMA 4 hubs for all conduit entries into boxes or enclosures rated NEMA 4 or NEMA 4X to maintain the NEMA 4, 4X rating of the respective enclosure.
5. Independently support all boxes. No parts of the weight or stress thereof shall be borne by the conduits termination therein.
6. All boxes shall be bonded to ground with a ground lug and a ground wire.

801252-3.9 MARKING AND LABELING. Equipment, wires, etc. shall be tagged, marked or labeled as specified:

- A. Legend plates and/or permanent labeling shall be provided for all equipment enclosures. Legend plates shall be provided to identify the equipment controlled, the power source, and the function of each device. Legend plates shall be weatherproof and abrasion-resistant phenolic/plastic engraved material and fastened with contact type permanent adhesive, screws, or rivets. Installation shall not break, crack, or deform the legend plate. Lettering shall be ¼ in. high, black on a white background, unless noted otherwise. Equipment enclosure may also be identified by a stenciled identification with a contrasting color (either black or white).
- B. Identify control wiring at each termination point and in junction/terminal boxes with wire number corresponding to the respective control wiring diagram or respective terminal numbering arrangement. Each individual control wire shall have unique identification and shall maintain that same identification from its point of origin to its final termination point. Wire markers shall be permanent pressure sensitive label with suitable numbers or letters for easy recognition. This applies to field wiring between equipment.
- C. Each individual circuit breaker, control panel, terminal panel, safety switch, panelboard, etc. shall be furnished with a phenolic-engraved legend plate that identifies the respective device, the power source, and the respective voltage, phase, and wire. Furnish additional phenolic-engraved legend plates as detailed in the Plans and/or where required by code.
- D. At electrical splice cans, handholes, manholes, pull boxes, and/or junction boxes identify each cable with respect to the system or device served.
- E. Color-code phase and neutral conductor insulation for No. 6 AWG or smaller. Provide colored marking tape for phase and neutral conductors for No. 4 AWG and larger. Insulated ground conductors shall have green colored insulation for all conductor sizes (AWG and/or KCMIL) to comply with NEC 250.119. Neutral conductors shall have white colored

insulation for No. 6 AWG and smaller to meet the requirements of NEC 200.6. Conductor insulation for 120/208 VAC, 1 phase, 3-wire with ground circuits shall be color-coded: Phase A -Black, Phase B - Red, Neutral - White, and Ground - Green. Conductor insulation for 120/240 VAC, 1 phase, 3-wire with ground circuits shall be color-coded: Phase A -Black, Phase B - Red, Neutral – White and Ground – Green.

- F. Furnish and install weatherproof warning label for each meter socket, enclosed circuit breaker, disconnect switch, switchboard, cutout, panelboard, load center, motor control center, and control panel to warn persons of potential electric arc flash hazards, per the requirements of NEC 110.16 "Flash Protection". Labels shall also conform to ANSI Z535.4-2011 "American National Standard for Product Safety Signs and Labels". NEC 110.16 requires that switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers that are likely to require examination, adjustment, servicing, or maintenance while energized shall be field marked to warn qualified persons of potential arc flash hazards. The markings shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment. This new requirement is intended to help reduce the occurrence of serious injury or death due to arcing faults to those working on or near energized electrical equipment. The warning labels are to indicate to a qualified worker who intends to open the equipment for analysis of work that a serious hazard exists and that the worker should follow appropriate work practices and wear appropriate personal protective equipment (PPE) for the specific hazard. Labels shall be as detailed in the Plans or shall include at least the following information: "Warning – Potential Arc-Flash Hazards exist while working on this energized equipment. Appropriate PPE Required.

801252-3.10 EQUIPMENT INSTALLED AT THE TERMINAL BUILDING. The AWOS data terminals and Graphic Weather Display shall be installed in the office area of the Terminal Building, as directed by the Airport Manager. The equipment shall be installed in accordance with the respective manufacturer’s recommendations and requirements and all applicable sections of FAA AC 150/5220-16E (or latest issue).

801252-3.11 CONTRACTOR'S/MANUFACTURER'S WARRANTY. The Contractor shall provide a one year warranty on all equipment that includes parts and labor. The Contractor will submit a statement certifying that the following minimum warranty will be provided for the equipment:

*“The equipment has been manufactured, installed, and will perform in accordance with the requirements of FAA AC 150/5220-16E (or latest issue in effect). Any defect in design, materials, or workmanship which may occur during proper and normal use during a period of 1 year from the date of commissioning of the AWOS will be corrected by repair or replacement by the Contractor and/or Manufacturer F.O.B. factory. This includes all labor and parts required to restore the AWOS to full service following a failure or malfunction covered under this warranty. The warranty shall begin when the AWOS is complete, functioning, and FAA-certified and commissioned.”*

Note: The Contractor is not responsible for inspections, quarterly/preventive maintenance checks, etc. required by the FAA and/or AWOS manufacturer AFTER FAA commissioning and during the one year warranty. This service will be provided under the current State Maintenance Contract. The Contractor, however, remains responsible for the one year's warranty as stated above.

801252-3.12 VHF VOICE TRANSMISSION. The AWOS shall be connected to the proposed VHF transmitter enabling it to broadcast the AWOS data and information.

801252-3.13 GROUNDING. The Contractor shall furnish and install all grounding shown in the Plans as required/recommended by the respective AWOS system manufacturer, as required by FAA AC 150/5220-16E, and/or as may be necessary or required to make a complete grounding system as required by the latest National Electrical Code (NFPA 70) in force. The reliability of the grounding system is dependent on careful, proper installation and choice of materials. Improper preparation of surfaces to be joined to make an electrical path, loose joints or corrosion can introduce impedance that will seriously impair the ability of the ground path to protect personnel and equipment and to absorb transients that can cause noise in communication circuits. The following functions are particularly important to ensure a reliable ground system:

- A. All products associated with the grounding system shall be UL-listed and labeled.
- B. All bolted or mechanical connections shall be coated with a corrosion preventative/conductive grease and lubricant suitable for electrical connections and grounding connections, before joining, Sanchem Inc. "NO-OX-ID "A-Special" compound, Burndy Penetrox E, or approved equal.
- C. Metallic surfaces to be joined shall be prepared by the removal of all non-conductive material, per 2020 NEC Article 250.12. All copper bus bars must be cleaned prior to making connections to remove surface oxidation.
- D. Metallic raceway fittings shall be made up tight to provide a permanent low impedance path for all circuits. Metal conduit terminations in enclosures shall be bonded to the enclosure with UL-listed fittings suitable for grounding. Provide grounding bushings with bonding jumpers for all metal conduits entering service equipment (meter base, CT cabinet, main service breaker enclosure, etc.), generator breaker enclosures, and automatic transfer switch enclosures. Provide grounding bushings with bonding jumpers for all metal conduits entering an enclosure through concentric or eccentric knockouts that are punched or otherwise formed so as to impair the electrical connection to ground. Standard locknuts or bushings shall not be the sole means for bonding where a conduit enters an enclosure through a concentric or eccentric knockout.
- E. Furnish and install ground rings, ground fields and/or ground rods at all locations where shown in the Plans or specified herein. Ground rods shall be 3/4-inch diameter, 10 feet long, UL-listed, copper-clad. Longer ground rods shall be provided where detailed in the Plans. Ground rods shall have 10 mils minimum copper coating. Top of ground rods shall be a minimum of 40 inches below finish grade unless otherwise noted in the Plans. **Ground ring**

**conductors shall be 42 inches minimum below grade to be below the frost line for Bond County, Illinois.** Ground rods shall be spaced, as detailed in the Plans, and in no case spaced less than one-rod length apart. All connections to ground rods and/or ground rings shall be made with exothermic weld type connectors, Cadweld by Erico Products, Inc., Solon, Ohio, (800-248-9353), Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (918-663-1440), or approved equal. Exothermic weld connections shall be installed in conformance with the respective manufacturer's directions using molds as required for each respective application. Bolted connections will not be permitted at ground rods or at buried grounding electrode conductors. Grounding electrode conductors shall be bare copper (stranded or solid) sized, as detailed in the Plans. In addition to the grounding work described herein and shown in the Plans, the Contractor shall test the electrode ground system with an instrument specifically designed for testing ground systems. If ground resistance exceeds 10 Ohms, contact the Project Engineer for further direction. Copies of ground system test results shall be furnished to the Resident Engineer.

- F. All connections, located above grade, between the different types of grounding conductors shall be made using UL-listed, double-compression, crimp-type connectors or UL-listed, bolted ground connectors. For ground connections to enclosures, cases, and frames of electrical equipment not supplied with ground lugs, the Contractor shall drill required holes for mounting a bolted, ground connector. All bolted, ground connectors shall be Burndy, Thomas and Betts, or equal. Tighten connections to comply with tightening torques in UL Standard 486A to assure permanent and effective grounding.
- G. All metal equipment enclosures, conduits, cabinets, boxes, receptacles, etc. shall be bonded to the respective grounding system. Provide grounding bushings at all conduits entering service entrance equipment (meter bases, service disconnects, service panelboards, etc.) and distribution panels or load centers and ground wire from bushing to ground bus in the respective service entrance equipment or distribution panel.
- H. Each feeder circuit and/or branch circuit shall include an equipment ground wire. Metal raceway or conduit shall not meet this requirement. The equipment ground wire from equipment shall not be smaller than allowed by 2020 NEC Table 250.122 "Minimum Size Conductors or Grounding Raceway and Equipment." When conductors are adjusted in size to compensate for voltage drop, equipment-grounding conductors shall be adjusted proportionately according to circular mil area. All equipment ground wires shall be Copper, either bare or insulated green in color. Where the equipment grounding conductors are insulated, they shall be identified by the color green, and shall be the same insulation type as the phase conductors.
- I. Bond the main electrical service neutral to ground at the main service disconnect. Bond the service neutral to ground at one location only per the NEC. A grounding connection shall not be made to any neutral circuit conductor on the load side of the service disconnecting means, except as permitted by 2020 NEC 250.24.
- J. The secondary neutral of all transformers (separately derived system transformers) shall be grounded in accordance with the NEC. The respective grounding electrode conductor shall

be connected to the neutral point of the transformer between the transformer and the output disconnecting means. Size of the grounding electrode conductor shall be in accordance with 2014 NEC Article 250.66 and Table 250.66 unless shown larger on the Drawings. A bond shall be provided between the neutral and transformer case, or other metal that is part of the AC equipment grounding system, so as to complete a circuit for fault current to the transformer winding from the AC equipment grounding system. Size of the neutral bonding conductor shall be in accordance with 2020 NEC Article 250.102.

- K. All exterior metal conduits, where not electrically continuous because of manholes, handholes, non-metallic junction boxes, etc., shall be bonded to all other metal conduit in the respective duct run, and at each end, with a Copper-bonding jumper sized in conformance with 2020 NEC 250.102. Where metal conduits terminate in an enclosure (such as a motor control center, switchboard, etc.) where there is not electrical continuity with the conduit and the respective enclosure, provide a bonding jumper from the respective enclosure ground bus to the conduit sized per 2020 NEC 250.102.
- L. Install grounding electrode conductors and/or individual ground conductors in Schedule 40 or Schedule 80 PVC conduit. Where grounding electrode conductors or individual ground conductors are run in PVC conduit, do not completely encircle conduit with ferrous and/or magnetic materials. Use non-metallic, reinforced fiberglass strut support. Where metal conduit clamps are installed, use nylon bolts, nuts, washers, and spacers to interrupt a complete metallic path from encircling the conduit.
- M. Individual ground conductors and/or grounding electrode conductors shall not be run in metallic conduit and shall not be encircled by metallic clamps. If local codes dictate that grounding conductors must be run in metal conduit or raceway, then the conduit or raceway must be bonded to the grounding conductor at both ends with a bonding jumper sized in accordance with the NEC 250.64(E). All such installations requiring individual grounding conduits to be run in metal conduit or raceway shall be verified and reviewed with the Resident Engineer/Resident Project Representative. This does not apply to AC equipment ground wires run with AC circuits.
- N. Install lightning protection down conductors, grounding electrode conductors, and/or individual ground conductors in Schedule 40 or Schedule 80 PVC conduit or exposed where acceptable to local codes. Where lightning protection down conductors, grounding electrode conductors, or individual ground conductors are run in PVC conduit, Do not completely encircle conduit with ferrous and/or magnetic materials. Use non-metallic reinforced fiberglass strut support. Where metal conduit clamps are installed, use nylon bolts, nuts, washers and spacers to interrupt a complete metallic path from encircling the conduit. This is required to avoid girdling of ground conductors. Girdling of a ground conductor is the result of placing the conductor in a ring of magnetic material. This ring could be a metallic conduit, U-bolt or strut-support pipe clamp, or other support hardware. The result of girdling ground conductors significantly increases the inductive impedance of the ground conductor. Inductive and capacitive impedance is a type of resistance that opposes the flow of alternating current. Any increase in the impedance of a ground conductor reduces its ability to effectively mitigate radio frequency noise in the ground system. The condition where a

ground conductor is girdled during a lightning strike results in phenomena known as Surge Impedance Loading. Surge impedance loading is a result of voltage and current reaching 500,000 volts and 10,000 amps for a short duration. Girdling further increases the impedance at lightning frequencies of 100 kilohertz to 100 megahertz. At these power and frequency levels, any increase in the impedance of the ground conductor must be controlled. During lightning discharge conditions a low inductive impedance path is more important than a low DC resistance path.

- O. All grounding system conductors shall turn toward the ground source when attaching to a home run. Minimum bending radius of ground conductors shall be eight (8) inches. Sharp bends will not be allowed.
- P. All liquid tight flexible metal conduits shall include an external bonding jumper per the requirements of FAA-STD-019e section 4.2.10.3. This bonding jumper shall be a #6 AWG stranded copper conductor. The bonding jumper shall terminate on approved grounding fittings at each end of the liquid tight flexible metal conduit or flexible metal conduit.

801252-3.13 RESTORATION. Any and all trenches and disturbed areas will be backfilled and restored to a smooth grade and seeded to the satisfaction of the Engineer. All trench settlement or disturbed areas shall be corrected for a period of one year. Restoration, grading, and seeding of areas disturbed during the installation of the proposed AWOS will be incidental to the AWOS installation.

#### METHOD OF MEASUREMENT

The complete, turnkey, AWOS II, inspected, accepted, certified, and commissioned by the FAA and installed in accordance with the Plans and these Special Provisions with the spare parts, shall be paid for at the Contract unit price per lump sum for Item AR801252 AWOS II, Installed. The unit price shall be full compensation for furnishing all materials, equipment, tools, and labor to construct this item of work. The unit price shall also include full compensation for the installation of necessary equipment to transmit AWOS broadcasts via the VHF transmitter, furnishing all required testing and calibration equipment, and providing spare parts. This item shall also include all associated conduits, cables, wiring, grounding, underground duct, communications/data links; all charges, materials, and labor required to install and connect the telephone line(s) to the location(s) required by the type of system installed; and miscellaneous items as required.

- A. Furnishing and installing a UHF communication/data link from the AWOS site to the Terminal Building will be considered incidental to this item, and no additional compensation will be allowed.
- B. Work associated with the AWOS located at the Terminal Building will be considered incidental to this item, and no additional compensation will be allowed.
- C. Coordination of telephone service for the AWOS and associated work will be considered incidental to this item, and no additional compensation will be allowed. The Owner shall pay

for all associated telephone utility company charges required to provide telephone service for the AWOS. The Contractor is not responsible for telephone utility charges associated with the proposed telephone service for the AWOS.

- D. AWOS site disconnect, power distribution block, surge protective device, circuit breaker panelboard, support structures, and associated equipment, materials, conduit, wiring and grounding will be considered incidental to this item, and no additional compensation will be allowed.
- E. Power and control wiring in conduit or duct from the AWOS Panelboard to the respective AWOS equipment, and power, control, or signal wiring in duct or conduit between AWOS equipment and/or control panels will be considered incidental to this item, and no additional compensation will be allowed.
- F. Furnishing and installing new electric feed in unit duct from the respective power source to the AWOS site will be paid for separately under Item 108.
- G. Fencing will be paid for separately under item 162. Gates will be paid for separately under Item 162.

#### BASIS OF PAYMENT

801252-5.1 Payment shall be made under:

Item AR801252      AWOS II, Installed – per Lump Sum.