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Letting April 27, 2018

Notice to Bidders, Specifications and Proposal



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. AU067
Aurora Municipal Airport
Aurora, Illinois
Kane County
Illinois Project No. ARR-4522
SBG Project No. 3-17-SBGP-139**



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 10:00 a.m. on April 27, 2018, 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. AU067
Aurora Municipal Airport
Aurora, Illinois
Kane County
Illinois Project No. ARR-4522
SBG Project No. 3-17-SBGP-139**

Install New Airfield Lighting Control and Monitoring System (ALCMS) Including Removing Existing System

For engineering information, please contact Kris Salvatera, P.E. of Crawford, Murphy & Tilly, Inc. at 630.820.1022.

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 10-18 of the Illinois Standard Specifications for Construction of Airports, 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 60 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 0.0%.

- 7. SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Illinois Standard Specifications for Construction of Airports, the Special Provisions dated March 2, 2018, and the Construction Plans dated March 2, 2018 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.

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 35 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

Randall S. Blankenhorn,
Secretary



Division of Aeronautics
Proposal Bid Bond

Sponsor _____ Item No. _____

IL Proj. No. _____ SBG Pr. No. _____ Letting Date _____

KNOW ALL MEN BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

_____ as SURETY, are held jointly, severally and firmly bound unto the SPONSOR identified above, in the penal sum of 5 percent of the total bid price, or for the amount specified in Section 6, Proposal Guaranty of the Proposal Document, whichever is the lesser sum, well and truly to be paid unto said SPONSOR, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, that whereas, the PRINCIPAL has submitted a bid proposal to the SPONSOR through its AGENT, the State of Illinois, Department of Transportation, Division of Aeronautics, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the SPONSOR through its AGENT shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, and as specified in the bidding and contract documents, submit a DBE Utilization Plan that is accepted and approved by the AGENT; and if, after the award by AGENT on behalf of SPONSOR, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents, including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to make the required DBE submission or to enter into such contract and to give the specified bond, the PRINCIPAL pays to the SPONSOR the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the SPONSOR may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the SPONSOR acting through its AGENT determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then SURETY shall pay the penal sum to the SPONSOR within fifteen (15) days of written demand therefor. If SURETY does not make full payment within such period of time, the AGENT may bring an action to collect the amount owed. SURETY is liable to the SPONSOR and to the AGENT for all its expenses, including attorney's fees, incurred in any litigation in which SPONSOR or AGENT prevail either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers _____ day of _____ A.D., _____ .

PRINCIPAL

(Company Name)

SURETY

(Company Name)

By _____
(Signature & Title)

By: _____
(Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
County of _____

I, _____, a Notary Public in and for said County, do hereby certify that _____ and _____
(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____ A.D. _____

My commission expires _____

Notary Public

In lieu of completing the above section of the Proposal Bid Form, the Principal may file an Electronic Bid Bond. By signing the proposal and marking the check box next to the Signature and Title line below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the SPONSOR through its AGENT under the conditions of the bid bond as shown above.

Electronic Bid Bond ID# _____

Company / Bidder Name _____

Signature and Title _____

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: July 2, 2016

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 that 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 that 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 that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 0.0% 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 that enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents that 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 required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures.
 - (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to DOT.DBE.UP@illinois.gov or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation
Bureau of Small Business Enterprises
Contract Compliance Section
2300 South Dirksen Parkway, Room 319
Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, 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. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization Plan approval or disapproval under the procedures of this Special Provision.

- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and scanned or faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
- (1) The names and addresses of DBE firms that will participate in the contract;
 - (2) A description, including pay item numbers, of the work each DBE will perform;
 - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
 - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the Utilization Plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
 - (6) If the contract goal is not met, evidence of good faith efforts; 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.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that 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. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that 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 that 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 prime 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 subsection (c)(6) of 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 that the apparent successful 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 that it is otherwise eligible for award. If the Department determines that 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 shall include a statement of reasons for the 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 in order to cure the deficiency.
 - (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. 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 forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order 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 consideration, 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 prime 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 submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (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 subcontractor, then a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that 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 DBE subcontracts to IDOT 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) That 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) That the DBE is aware that 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) That 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 prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime 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) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice 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 prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime 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 shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. 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 thirty 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 that 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: April 2, 2015

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 Monday through Sunday 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

Revised: April 1, 2011

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 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form AER 260A submitted for the approval of the subcontractor's work.

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

Revised: January 1, 2006

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.

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 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 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 35 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.

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 April 1, 2012 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.

DELETE: "See contract documents for current schedule of deductions."

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 April 1, 2012 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.

90-10 TRUST AGREEMENT OPTION.

DELETE: The entire section.



Required Contract Provisions for Airport Improvement Program and for Obligated Sponsors

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REQUIREMENTS

1. Required Contract Provisions

Federal laws and regulations require that recipients of federal assistance (Sponsors) include specific contract provisions in certain contracts, requests for proposals, or invitations to bid.

Certain provisions must be included in all sponsor contracts, regardless of *whether or not* the contracts are federally-funded. This requirement was established when a sponsor accepted the Airport Improvement Program (AIP) grant assurances.

To maintain eligibility of their procurement actions, a sponsor must incorporate applicable contract provisions in all federally-assisted procurement and contract documents, including all subcontracts. For purposes of determining requirements for contract provisions, the term **contract** includes subcontracts.

2. Sponsor Requirements

In general, the sponsor must:

- 1) Incorporate applicable contract provisions in each contract funded under AIP;
 - a. Except as noted herein, a sponsor must physically incorporate the text of the provision within the procurement documents.
 - b. Where specifically noted, sponsors may incorporate select provisions by reference provided the sponsor indicates that the reference has the same force and effect as if given in full text.
- 2) Require the contractor (including all subcontractors) to insert these contract provisions in each lower tier contracts (e.g. subcontract or sub-agreement);
- 3) Require the contractor (or subcontractor) to incorporate the applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services;
- 4) Require that the prime contractor be responsible for compliance with these contract provisions by any subcontractor, lower-tier subcontractor or service provider;
- 5) Verify that any required local or State provision does not conflict with, or alter a Federal law or regulation.

3. Incorporation of Provisions

The statutes and regulations that establish the requirements for contract provisions do not always specify language the sponsor must use to address the requirement. Appendix A of this guide provides information on when a provision or clause has mandatory language that a sponsor must apply. Refer to the subheading *Applicability* for each provision.

Whenever a clause or provision has mandatory text, the sponsor must incorporate the text of the provision without change. The only exception to this restriction is for those instances within the provision text that require the sponsor to insert appropriate information such as name or value. To align with the sponsor's standard contract language, the word "Owner" may also be replaced with "Airport Authority" or their standard method of referring to the sponsor in contracts. Any modification beyond what is specifically permitted is not permitted and may invalidate the clause.

For those provisions that do not have required language, this guidance provides model language acceptable to the FAA in meeting the intent and purpose of the law or regulation. Some sponsors may already have standard procurement language that is equivalent to those Federal provisions that do not have explicit mandatory language. In these cases, sponsors may use their existing standard procurement provision language provided the text meets the intent and purpose of the Federal law or regulation.

Contract clause language must be made available to bidders. The Sponsor does this by including the required language in Requests for Bids, Notices to Bidders, or in the contract.

4. Requests for Bids (Advertisement) and Notice to Bidders

The sponsor may incorporate certain provisions *by reference* in the Request for Bids (the Advertisement) rather than including the entire text of the provision in the Request or Notice to Bidders. The sponsor must incorporate the full text of these provisions within any contract that originates from the procurement action. The provisions that can be incorporated by reference in the Request or Notice are:

- 1) Buy American Preference
- 2) Foreign Trade Restriction
- 3) Davis Bacon
- 4) Affirmative Action
- 5) Government-wide Debarment and Suspension
- 6) Government-wide Requirements for Drug-free Workplace

5. Requirements For All Contracts Entered into by Obligated Sponsors.

A sponsor's acceptance of previous grant assurances obligates them to include certain notifications in all contracts and procurement actions they undertake regardless of funding source. Contracts and agreements fully funded by the sponsor must incorporate those select provisions.

6. Failure to Comply with Provisions

Sponsor failure to incorporate required provisions will jeopardize AIP eligibility of the sponsor's project. Contractor failure to comply with the terms of these contract provisions may be sufficient grounds to:

- 1) Withhold progress payments or final payment;
- 2) Terminate the contract for cause;
- 3) Seek suspension/debarment; or

- 4) Take other action determined to be appropriate by the sponsor or the FAA.

7. Applicability Matrix for Contract Provisions

Table 1 summarizes the applicability of contract provisions based upon the type of contract or agreement. The dollar threshold represents the value at which, when equal to or exceeded, the sponsor must incorporate the provision in their contract or agreement. Supplemental information addressing applicability and use for each provision is located in Appendix A.

Meaning of cell values

- REQD - a provision the sponsor must incorporate in their procurement action.
- Limited –a provision with limited applicability depending on circumstances of the procurement.
- n/a – a provision that is not applicable for that procurement type.

Table 1 – Applicability of Provisions

Provision	Dollar Threshold	Professional Services	Construction	Equipment	Property (Land)	Non-AIP Contracts
a. Access to Records and Reports	\$ 0	REQD	REQD	REQD	REQD	n/a
b. Buy American Preferences	\$ 0	Limited	REQD	REQD	Limited	n/a
c. Civil Rights – General	\$ 0	REQD	REQD	REQD	REQD	REQD
d. Civil Rights - Title VI Assurances	\$ 0	REQD	REQD	REQD	REQD	REQD
(1) Notice - Solicitation	\$ 0	REQD	REQD	REQD	REQD	REQD
(2) Clause - Contracts	\$ 0	REQD	REQD	REQD	REQD	REQD
(3) Clause – Transfer of U.S. Property	\$ 0	n/a	n/a	n/a	REQD	REQD
(4) Clause – Transfer of Real Property	\$ 0	n/a	n/a	n/a	REQD	REQD
(5) Clause - Construct/Use/Access to Real Property	\$ 0	n/a	n/a	n/a	REQD	REQD
(6) List – Pertinent Authorities	\$ 0	REQD	REQD	REQD	REQD	REQD
e. Disadvantaged Business Enterprise	\$ 0	REQD	REQD	REQD	REQD	n/a
f. Energy Conservation Requirements	\$ 0	REQD	REQD	REQD	REQD	n/a
g. Federal Fair Labor Standards Act	\$ 0	REQD	REQD	REQD	REQD	REQD
h. Occupational Safety and Health Act	\$ 0	REQD	REQD	REQD	REQD	REQD
i. Rights to Inventions	\$ 0	Limited	Limited	Limited	n/a	n/a
j. Trade Restriction Certification	\$ 0	REQD	REQD	REQD	REQD	n/a
k. Veteran’s Preference	\$ 0	REQD	REQD	REQD	REQD	n/a
l. Seismic Safety	\$ 0	Limited	Limited	n/a	n/a	n/a
m. Copeland Anti-Kickback	\$ 2,000	Limited	REQD	Limited	Limited	n/a
n. Davis Bacon Requirements	\$ 2,000	Limited	REQD	Limited	Limited	n/a
o. Distracted Driving	\$3,500	REQD	REQD	REQD	REQD	n/a
p. Affirmative Action Requirement	\$10,000	Limited	REQD	Limited	Limited	n/a
q. Equal Employment Opportunity	\$10,000	Limited	REQD	Limited	Limited	n/a
(1) EEO Contract Clause	\$10,000	Limited	REQD	Limited	Limited	n/a
(2) EEO Specification	\$10,000	Limited	REQD	Limited	Limited	n/a
r. Prohibition of Segregated Facilities	\$10,000	Limited	REQD	Limited	Limited	n/a
s. Recovered Materials	\$10,000	Limited	REQD	REQD	Limited	n/a
t. Termination of Contract	\$10,000	REQD	REQD	REQD	REQD	n/a
u. Debarment and Suspension	\$25,000	REQD	REQD	REQD	Limited	n/a
v. Contract Work Hours and Safety Standards	\$100,000	Limited	REQD	Limited	Limited	n/a
w. Lobbying Federal Employees	\$ 100,000	REQD	REQD	REQD	REQD	n/a
x. Breach of Contract	\$150,000	REQD	REQD	REQD	REQD	n/a
y. Clean Air/Water Pollution Control	\$150,000	REQD	REQD	REQD	REQD	n/a

APPENDIX A – CONTRACT PROVISIONS

A1 ACCESS TO RECORDS AND REPORTS

A1.1 SOURCE

2 CFR § 200.333

2 CFR § 200.336

FAA Order 5100.38

A1.2 APPLICABILITY

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

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of part 200.

A1.3 CONTRACT CLAUSE

ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the sponsor, 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 SOURCE

41 CFR part 60-4

Executive Order 11246

A2.2 APPLICABILITY

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

To find the goals for minority participation, a sponsor must either refer to the Federal Register Notice or to the Department of Labor online document, "Participation Goals for Minorities and Females". EA's and SMSA's cross state boundaries so a sponsor may have to refer to entries for adjacent states to find their project location.

A sponsor must insert the applicable percentage minority goal. Sponsor must not simply insert a reference to the Federal Register Notice.

Female Participation. Executive Order 11246 has set a goal of 6.9% nationally for female participation for all construction contractors. This value does not change per county or state.

Contract Types –

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

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

Professional Services: The sponsor must incorporate this notice in any professional service agreement if the professional service agreement includes construction work (as defined above) that exceed \$10,000. Examples include installation of noise monitoring systems.

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

Use of Provision – The sponsor must incorporate the text of this provision without modification. The sponsor must incorporate the established minority participation goal and the covered area by geographic name within the provision text.

A2.3 CONTRACT 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:

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 -	7.6

IL - Macon	
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 - JoDavies 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, 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	11.4

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

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

violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

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

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

A3 BREACH OF CONTRACT TERMS

A3.1 SOURCE

2 CFR § 200 Appendix II(A)

A3.2 APPLICABILITY

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

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

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of part 200. Select either "contractor" or "consultant" as applicable.

A3.3 CONTRACT CLAUSE

BREACH OF CONTRACT TERMS

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

Owner will provide the [Contractor / Consultant] written notice that describes the nature of the breach and corrective actions the [Contractor / Consultant] 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 / Consultant] must correct the breach. Owner may proceed with termination of the contract if the [Contractor / Consultant] fails to correct the breach by deadline indicated in the Owner's notice.

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

A4 BUY AMERICAN PREFERENCE

A4.1 SOURCE

Title 49 USC § 50101

A4.2 APPLICABILITY

The sponsor must meet the Buy American preference requirements found in 49 USC § 50101 in all AIP-funded projects. The Buy America requirements flow down from the sponsor to first tier contractors, who are responsible for ensuring that lower tier contractors and subcontractors are in compliance. The Buy American preference also applies to professional service agreements if the agreement includes any manufactured product as a deliverable.

A4.3 CONTRACT CLAUSE

- (a) The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program (AIP).
- (b) 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, 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.
- (c) The successful bidder will be required to assure that only domestic steel and domestically manufactured products will be used by the Contractor, subcontractors, producers, and suppliers in the performance of this contract. The North American Free Trade Agreement (NAFTA) specifically excluded federal grant programs such as the AIP. Therefore, NAFTA does not change the requirement to comply with the Buy American requirement in the Act. Exceptions to this are for products, other than steel, that:

- (1) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality;
- (2) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest;
- (3) the FAA has determined that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent; or
- (4) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990,
 - (i) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment, and
 - (ii) final assembly of the facility or equipment has occurred in the United States.

The FAA must grant waivers for any items that are included in these above exceptions. Bidders can review items already approved under the FAA nationwide approved list of "Equipment Meeting Buy American Requirements" on the FAA website, which do not require a specific FAA waiver.

All waivers are the responsibility of the Contractor, must be obtained prior to the Notice to Proceed, and must be submitted to the Illinois 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.

A5 CIVIL RIGHTS - GENERAL

A5.1 SOURCE

49 USC § 47123

A5.2 APPLICABILITY

Note: This provision is in addition to the Civil Rights – Title VI provisions.

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

Use of Provision – There are two versions of this provision. One applies to sponsor contracts and the other applies to sponsor lease agreements and transfer agreements. The sponsor must incorporate the text of the appropriate provision without modification.

A5.3 CONTRACT CLAUSE

A5.3.1 Sponsor Contracts

GENERAL CIVIL RIGHTS PROVISIONS

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

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

A5.3.2 Sponsor Lease Agreements and Transfer Agreements

GENERAL CIVIL RIGHTS PROVISIONS

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

This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport through the Airport Improvement Program.

In cases where Federal assistance provides, or is in the form of personal property; real property or interest therein; structures or improvements thereon, this provision obligates the party or any transferee for the longer of the following periods:

- (a) The period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits; or
- (b) The period during which the airport sponsor or any transferee retains ownership or possession of the property.

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.1 SOURCE

49 USC § 47123

FAA Order 1400.11

A6.2 APPLICABILITY

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

The clauses are as follows:

A6.2.1 Applicability of Title VI Solicitation Notice

a. Contract Clause	b. The Sponsor must include the contract clause in:	c. Clause Text is Included in Paragraph
d. Title VI Solicitation Notice	1) All solicitations for bids, requests for proposals work, or material subject to the nondiscrimination acts and regulations made in connection with Airport Improvement Program grants; and 2) All proposals for negotiated agreements regardless of funding source.	e. A6.3.1
f. Title VI Clauses for Compliance with Nondiscrimination Requirements	g. Every contract or agreement, unless the sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities	h. A6.3.2
Title VI Required Clause for Property Interests Transferred from the United States	i. As a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.	j. A6.3.3
k. Title VI Required Clause for Transfer of Real Property Acquired or Improved Under the Activity, Facility or Program	l. As a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for all transfers of real property acquired or improved under the activity, facility, or program	m. A6.3.4
Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program	n. As a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program	o. A6.3.5
Title VI List Of Pertinent Nondiscrimination Acts And Authorities	p. Insert this list in every contract or agreement, unless the sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities	q. A6.3.6

A6.3 CONTRACT CLAUSE

A6.3.1 Title VI Solicitation Notice

Title VI Solicitation Notice:

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

A6.3.2 Title VI Clauses for Compliance with Nondiscrimination Requirements

Compliance with Nondiscrimination Requirements

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

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.

Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

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.

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.

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.

A6.3.3 Title VI Clauses for Deeds Transferring United States Property

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

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

NOW, THEREFORE, the Federal Aviation Administration as authorized by law and upon the condition that the City of Aurora will accept title to the lands and maintain the project constructed thereon in accordance with Public Law 114-141, for the Airport Improvement Program and the policies and procedures prescribed by the Federal Aviation Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the City of Aurora all the right, title and interest of the U.S. Department of Transportation/Federal Aviation Administration in and to said lands described in the Exhibit A.

(HABENDUM CLAUSE)

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

The City of Aurora, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the City of Aurora will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the Federal Aviation Administration and its assigns as such interest existed prior to this instruction].*

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

A6.3.4 Title VI Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

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

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

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

A6.3.5 Title VI Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program

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

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

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

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

A6.3.6 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 U.S.C. § 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 U.S.C. § 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 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or

activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;

The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

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

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.1 SOURCE

2 CFR § 200, Appendix II(G)

A7.2 APPLICABILITY

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

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor’s language must fully satisfy the requirements of Appendix II to 2 CFR §200.

A7.3 CONTRACT CLAUSE

CLEAN AIR AND WATER POLLUTION CONTROL

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

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

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.1 SOURCE

2 CFR § 200, Appendix II(E)

A8.2 APPLICABILITY

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

Contract Types –

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

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

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

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

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

A8.3 CONTRACT CLAUSE

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

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

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

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

3. Withholding for Unpaid Wages and Liquidated Damages.

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

4. Subcontractors.

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

A9 COPELAND “ANTI-KICKBACK” ACT

A9.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Parts 3 & 5

A9.2 APPLICABILITY and PURPOSE

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

Contract Types –

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

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

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

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

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

A9.3 CONTRACT CLAUSE

COPELAND "ANTI-KICKBACK" ACT

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

A10 DAVIS-BACON REQUIREMENTS

A10.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Part 5

A10.2 APPLICABILITY

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

Contract Types –

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

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

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

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

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

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

A10.3 CONTRACT CLAUSE

DAVIS-BACON REQUIREMENTS

1. Minimum Wages

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

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

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

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

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

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

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

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

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

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

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

2 Withholding.

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

3. Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which 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, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

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

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

5. Compliance with Copeland Act Requirements.

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

6. Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in

any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

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

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

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

9. Disputes Concerning Labor Standards.

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

10. Certification of Eligibility.

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

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

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

A11 DEBARMENT AND SUSPENSION

A11.1 SOURCE

2 CFR part 180 (Subpart C)

2 CFR part 1200

DOT Order 4200.5

A11.2 APPLICABILITY

The sponsor must verify that the firm or individual that it is entering into a contract with are not presently suspended, excluded or debarred by any Federal department or agency from participating in federally-assisted projects. The sponsor accomplishes this by: (1) checking the System for Award Management (SAM.gov) to verify that the firm or individual is not listed in SAM.gov as being suspended, debarred or excluded, (2) collecting a certification from the firm or individual that they are not suspended, debarred or excluded, and (3) incorporating a clause in the contract that requires lower tier contracts to verify that no suspended, debarred or excluded firm or individual are included in the project.

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR part 180. For professional service agreements, sponsor may substitute bidder/offeror with consultant.

A11.3 CONTRACT CLAUSE

A11.3.1 Bidder or Offeror Certification

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

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

A11.3.2 Lower Tier Contract Certification

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

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

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

2. Collecting a certification statement similar to the Certificate Regarding Debarment and Suspension (Bidder or Offeror), above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract

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

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.1 SOURCE

49 CFR part 26

A12.2 APPLICABILITY and PURPOSE

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

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

Clause in all solicitations for proposals for which a contract goal has been established.

Clause in each prime contract

Clause in solicitations that are obtaining DBE participation through race/gender neutral means.

Use of Provision –

1. Solicitations with a DBE Project Goal - 49 CFR §26.53 requires a sponsor's solicitation to address what a contractor must submit on proposed DBE participation. This language is not required for projects where DBE participation is by race-gender neutral means.

The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements.

The sponsor may require the contractor's submittal on proposed DBE participation either with the bid or within a specified timeframe after bidding.
2. Contracts Covered by DBE Program - Sponsors must incorporate this language if they have a DBE program on file with the FAA. This includes projects where DBE participation is obtained through race-gender neutral means (i.e. no project goal). Sections §26.13 and §26.29 establish mandatory language for contractor assurance and prompt payment. The sponsor must not modify the language.
3. The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements for a sponsor that is not applying a project specific contract goal but is covered by a DBE program on file with the FAA.
4. Sponsors that do not have a DBE program on file with the FAA are not required to include DBE provisions and clauses.

A12.3 REQUIRED PROVISIONS

A12.3.1 Solicitation Language (Project 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 bid responsiveness, the Bidder or Offeror must submit the following information with their 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) 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 successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in their commitment. This Bidder or Offeror must submit the DBE's written confirmation of participation within 5 calendar days after bid opening.

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

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

A12.3.3 Prime Contracts (Projects covered by DBE Program)

DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§ 26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of 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.

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

A13 DISTRACTED DRIVING

A13.1 SOURCE

Executive Order 13513

DOT Order 3902.10

A13.2 APPLICABILITY

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

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements. .

A13.3 CONTRACT CLAUSE

TEXTING WHEN DRIVING

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

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

A14 ENERGY CONSERVATION REQUIREMENTS

A14.1 SOURCE

2 CFR § 200, Appendix II(H)

A14.2 APPLICABILITY

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

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully these requirements. Sponsor may substitute "contractor and subcontractor" with "consultant and sub-consultant" for professional service agreements.

A14.3 CONTRACT CLAUSE

ENERGY CONSERVATION REQUIREMENTS

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

A15 EQUAL EMPLOYMENT OPPORTUNITY (E.E.O.)

A15.1 SOURCE

2 CFR 200, Appendix II(C)

41 CFR § 60-1.4

41 CFR § 60-4.3

Executive Order 11246

A15.2 APPLICABILITY

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

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

Contract Types –

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

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

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

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

A15.3 MANDATORY CONTRACT CLAUSE

A15.3.1 E.E.O. Contract Clause

EQUAL OPPORTUNITY CLAUSE

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identify or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of

Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however,* That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

A15.3.2 EEO Specification

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

1. As used in these specifications:

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

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

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or 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 area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

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

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

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

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

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

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

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

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

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

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

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

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

A16 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

A16.1 SOURCE

29 U.S.C. § 201, et seq

A16.2 APPLICABILITY

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

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

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

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 29 U.S.C. § 201. The sponsor must select *contractor* or *consultant*, as appropriate for the contract.

A16.3 CONTRACT CLAUSE

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

The [*contractor* | *consultant*] has full responsibility to monitor compliance to the referenced statute or regulation. The [*contractor* | *consultant*] 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 SOURCE

31 U.S.C. § 1352 – Byrd Anti-Lobbying Amendment

2 CFR part 200, Appendix II(J)

49 CFR part 20, Appendix A

A17.2 APPLICABILITY

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

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

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

A17.3 CONTRACT CLAUSE

CERTIFICATION REGARDING LOBBYING

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

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

41 CFR § 60

A18.2 APPLICABILITY

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

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

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

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

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

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 41 CFR § 60.

A18.3 CONTRACT CLAUSE

PROHIBITION of SEGREGATED FACILITIES

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

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

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

A19 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A19.1 SOURCE

20 CFR part 1910

A19.2 APPLICABILITY

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

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 20 CFR part 1910.

A19.3 CONTRACT CLAUSE

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor 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 SOURCE

2 CFR § 200.322

40 CFR part 247

A20.2 APPLICABILITY

Sponsors of AIP funded development and equipment projects must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. Section 6002 emphasizes maximizing energy and resource recovery through use of affirmative procurement actions for recovered materials identified in the EPA guidelines.

The requirements of § 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.

Contract Types – This provision applies to any contracts that include procurement of products where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000.

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

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

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR § 200.

A20.3 CONTRACT CLAUSE

Procurement of Recovered Materials

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use of 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,

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/epawaste/conserve/tools/cpg/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 SOURCE

2 CFR § 200, Appendix II(F)

37 CFR §401

A21.2 APPLICABILITY

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

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

A21.3 CONTRACT CLAUSE

RIGHTS TO INVENTIONS

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

49 CFR part 41

A22.2 APPLICABILITY

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

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

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

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

Use of Provision – The regulation does not prescribe mandatory language. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 CFR part 41.

A22.3 CONTRACT CLAUSE

A22.3.1 Professional Service Agreements for Design

Seismic Safety

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

A22.3.2 Construction Contracts

Seismic Safety

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

A23 TERMINATION OF CONTRACT

A23.1 SOURCE

2 CFR § 200 Appendix II(B)

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

A23.2 APPLICABILITY

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

Use of Provision –

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

Termination for Convenience – The sponsor must include a clause for termination for convenience. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor’s language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

Equipment, Professional Services and Property – The sponsor may use their established clause language provided that it adequately addresses the intent of Appendix II(B) to Part 200, which addresses termination for fault and for convenience.

A23.3 CONTRACT CLAUSE

A23.3.1 Termination for Convenience

Termination for Convenience (Construction & Equipment Contracts)

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

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

Owner agrees to pay Contractor for:

- a) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;

documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;

reasonable and substantiated claims, costs and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and reasonable and substantiated expenses to the contractor directly attributable to Owner’s termination action

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

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

Termination for Convenience (Professional Services)

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

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

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

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

A23.3.2 Termination for Default

Termination for Default (Construction)

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

Termination for Default (Equipment)

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

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

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

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

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

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

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

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

Termination for Default (Professional Services)

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

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

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

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

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

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

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

b) **Termination by Consultant:** The Consultant may terminate this Agreement in whole or in part, if the Owner:

1. Defaults on its obligations under this Agreement;
2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
3. Suspends the Project for more than [180] days due to reasons beyond the control of the Consultant.

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

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

A24 TRADE RESTRICTION CERTIFICATION

A24.1 SOURCE

49 USC § 50104

49 CFR part 30

A24.2 APPLICABILITY

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

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

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

A24.3 CONTRACT CLAUSE

TRADE RESTRICTION CERTIFICATION

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

- a. 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 (U.S.T.R.);
- b. 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 U.S.T.R; and
- c. has not entered into any subcontract for any product to be used on the Federal on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R.

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

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 U.S.T.R. or
- (2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or
- (3) who incorporates in the public works project any product of a foreign country on such U.S.T.R. 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 U.S.T.R., 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 may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

A25 VETERAN'S PREFERENCE

A25.1 SOURCE

49 USC § 47112(c)

A25.2 APPLICABILITY

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

Use of Provision – The regulation does not prescribe mandatory language, the following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 U.S.C. § 47112.

A25.3 CONTRACT CLAUSE

VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 U.S.C. 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.

SECTION III

Special Provisions

For

**INSTALL AIRFIELD LIGHTING CONTROL AND
MONITORING SYSTEM (ALCMS)
INCLUDING REMOVING EXISTING SYSTEM**

**ILLINOIS PROJECT: ARR-4522
S.B.G. PROJECT: 3-17-SBGP-139**

At

**AURORA MUNICIPAL AIRPORT
AURORA, ILLINOIS**

March 2, 2018

Prepared By:

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March 2, 2018



GENERAL

These Special Provisions, together with applicable Standard Specifications, 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, Division of Aeronautics for the construction of the subject project at the Aurora Municipal Airport, Aurora, Illinois.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The "Illinois Standard Specifications for Construction of Airports" dated April 1, 2012, State of Illinois Department of Transportation, Division of Aeronautics shall govern the project except as otherwise noted in these Special Provisions. In cases of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern. When noted within the Special Provisions, the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction", Adopted April 1, 2016, shall also apply.

The "Illinois Standard Specifications for Construction of Airports" dated April 1, 2012 can be obtained from the Illinois Department of Transportation, Division of Aeronautics website at <http://www.idot.illinois.gov/doing-business/procurements/construction-services/contractors-resources/index> or from the Division of Aeronautics.

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DIVISION I – GENERAL PROVISIONS

SECTION 40 – SCOPE OF WORK

40-05 MAINTENANCE OF TRAFFIC

ADD:

The Contractor shall be responsible for cleaning and maintaining all haul roads and use a pick-up type sweeper on all pavements and adjacent roadways utilized in hauling operations when material is tracked onto said pavement. **The Contractor shall have a sweeper on site and maintain all pavements clear of dirt and debris at all times or as requested by the Airport Manager, the Airport Manager's authorized representative or Resident Engineer.** If the Contractor fails to comply with the Standard Specifications, Contract Plans or these Special Provisions concerning traffic control, the Engineer shall execute such work as may be deemed necessary to correct deficiencies and the cost thereof shall be deducted from compensation due or which may become due the Contractor under the contract. The Contractor shall be responsible for supplying, maintaining and moving all barricades required for construction. The cost thereof shall not be paid for separately, but shall be considered incidental to the contract unit prices.

The Airport Manager, following consultation with the Resident Engineer, will give proper notice to the nearest Flight Service Station and the Airways Facilities Chief of the Federal Aviation Administration prior to the beginning of construction.

The Contractor shall consult with the Resident Engineer in arranging his 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.

The Contractor shall not be entitled to any extra compensation due to delays or inconveniences caused by said necessary methods, procedures, and measures to protect air traffic.

The Airport Manager shall retain the authority to change the phasing of the work and/or the sequence of construction.

The Contractor shall not have access to any part of the active airfield (runway, taxiway or apron) for all equipment or personnel without the approval of the Airport Manager or the Airport Manager's authorized representative coordinated through the Resident Engineer.

40-09 AIRPORT OPERATIONS DURING CONSTRUCTION

ADD:

a. Construction Activity and Aircraft Movements

For construction activity to be performed in areas other than active operational areas, the storage and parking of equipment and materials, when not in use or about to be installed, shall not encroach upon active operational areas. In protecting operational areas, the minimum clearances maintained for runways shall be in conformance with Part 77 of the Federal Aviation Regulations.

All construction operations shall conform to the plans and in accordance with AC 150/5370-2 (Latest Edition) Operational Safety on Airports During Construction.

The Contractor shall provide their own radio capable of transmitting and receiving on all Airport frequencies.

b. Limitations on Construction

- (1) Open flame welding or torch cutting operations shall be prohibited, unless adequate fire and safety precautions are provided.
- (2) Open trenches, excavations and stockpiled material near any pavements shall be prominently marked with red flags and lighted by light units during hours of restricted visibility and/or darkness.
- (3) Stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions.
- (4) The use of explosives shall be prohibited.
- (5) Burning shall not be allowed.

c. Debris

Waste and loose material capable of causing damage to aircraft landing gears, propellers, or being ingested in jet engines shall not be placed on active aircraft movement areas. Material tracked on these areas shall be removed continuously during the work project. The Contractor shall provide garbage cans in employee parking areas and storage areas for debris.

SECTION 50 – CONTROL OF WORK

50-06 CONSTRUCTION LAYOUT

RESPONSIBILITY OF THE RESIDENT ENGINEER

DELETE:

Paragraphs A and B and replace with the following:

- A. The Resident Engineer will locate and reference three (3) control points within the limits of the project.
- B. A benchmark has been established along the project outside of construction lines.

ADD:

- M. It is not the responsibility of the Resident Engineer to check the correctness of the Contractor's stakes or forms, except as provided herein; however, any errors that are apparent shall be immediately called to the Contractor's attention, and he shall be required to make the necessary correction before the stakes are used for construction purposes.

RESPONSIBILITY OF THE CONTRACTOR

ADD:

- H. The Contractor shall immediately notify the Resident Engineer of conflicts or discrepancies with the established control points.
- I. Construction layout shall not be paid for separately, but shall be considered incidental to the pay item for which the layout is required.

50-10 INSPECTION OF WORK

ADD:

The Contractor shall provide portable flood lighting for nighttime construction. Sufficient units shall be provided so that work areas are illuminated to a level of five horizontal foot candles. The lighting levels shall be calculated and measured in accordance with the current standards of the Illumination Engineering Society. Lights shall be positioned so as not to interfere with Airport operations.

50-12 LOAD RESTRICTIONS

ADD:

Access to the construction work area is limited to the haul routes as shown in the plans. The use of existing airfield pavements by the Contractor's construction traffic, including all haul traffic, is limited to the hauling routes shown in the plans. Use of existing airfield pavement other than as shown in the plans is prohibited. Any damage to existing airfield pavement due to construction traffic operating within or beyond the approved work limits, hauling within or outside of the approved haul/access routes and construction traffic operating in prohibited areas shall be repaired by the Contractor at his own expense to the satisfaction of the Owner.

The Contractor shall coordinate construction hauling, construction access and load restrictions with the jurisdictional authority as required. The Contractor shall be responsible for damage to any airfield pavement or public road caused by his construction operations. **Any damage to existing airfield pavements or public roads shall be repaired by the Contractor at his own expense to the satisfaction of the Owner. Contractor shall obtain written permission from the Airport Owner to use any airfield pavements.**

50-16 FINAL INSPECTION

ADD:

All work on the punch list shall be considered part of the contract and shall be considered incidental to the completion of the contract. If the Contractor believes that an item listed on the punch list is beyond the scope of the contract, the Contractor shall notify the Engineer in writing prior to commencing work on the punch list item in question. Any punch list items completed by the Contractor without such written notification shall be considered incidental to the contract and shall not be eligible for payment unless determined otherwise by the Engineer and Owner.

50-18 PLANS AND WORK DRAWINGS

DELETE:

References to “approval” in first paragraph and replace with “review”.

REVISE the fifth paragraph to read:

Shop drawings submitted by the Contractor for materials and/or equipment to be provided as a part of the contract shall be reviewed by the Project Engineer for substantial conformance of said materials and/or equipment, to contract requirements. Shop drawings shall be fully descriptive, complete and of sufficient detail for ready determination of compliance.

REVISE the last paragraph to read:

The following information shall be clearly marked on each shop, working, and layout drawing, catalog cut, pamphlet specifications sheet, etc., submitted.

PROJECT LOCATION:	Aurora Municipal Airport
PROJECT TITLE:	Install ALCMS
PROJECT NUMBERS:	Illinois Project: ARR-4522 SBG Project: 3-17-SBGP-139
CONTRACT ITEM:	(i.e., AR800178 Fiber Optic Cable)
SUBMITTED BY:	(Contractor/Subcontractor Name)
DATE:	(Date of Submittal)

SECTION 60 – CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

ADD: After the last paragraph

The Contractor shall certify all materials contained in the contract. Certification documentation shall be submitted to the Resident Engineer. It shall be the sole responsibility of the Contractor to ensure the delivery of adequate and accurate documentation prior to the delivery of the materials.

If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 50-18, 60-01, 60-03 and 60-11 of the Standard and Special Provisions, the pay item shall not be included on the Construction Progress Payment report until such submittals have been furnished.

60-03 CERTIFICATION OF COMPLIANCE

ADD:

Additional requirements are specified in Section 60-11 Certification of Materials.

60-11 CERTIFICATION OF MATERIALS

ADD:

The Contractor shall certify all materials incorporated into the contract. Certification documentation shall be submitted to the Resident Engineer. It shall be the **sole** responsibility of the Contractor to ensure the submittal of adequate and accurate documentation in order to satisfy the contract material certification requirements **prior** to the delivery of the materials. Materials without certification or those with certification that demonstrates the materials do not meet the requirements of the plans and specifications shall be considered nonconforming and subject to the provisions of Section 50-02.

It shall be the sole responsibility of the Contractor to provide certification that **all** materials to be used on the project meets the "Buy America" requirements. This certification shall be submitted as soon as possible, but no later than the shop drawing submittal.

As a guide to the certification process and requirements, the Contractor shall use the Illinois Department of Transportation/Division of Aeronautics MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS dated April 1, 2010 or latest edition including any addendums. Copies of this manual are available by contacting Mr. Mike Wilhelm-Division of Aeronautics at (217) 785-4282 or from their website at: "<http://www.idot.illinois.gov/doing-business/procurements/construction-services/contractors-resources/index>".

The cost of providing the required material documentation and certifications shall **not** be paid for separately, but shall be considered incidental to the associated item.

All sheets of all submittals shall contain the following information:

PROJECT LOCATION:	Aurora Municipal Airport
PROJECT TITLE:	Install ALCMS
PROJECT NUMBERS:	Illinois Project: ARR-4522 SBG Project: 3-17-SBGP-139
CONTRACT ITEM:	(i.e., AR800178 Fiber Optic Cable)
SUBMITTED BY:	(Contractor/Subcontractor Name)
DATE:	(Date of Submittal)

SECTION 70 – LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

70-17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS

ADD:

Special care shall be taken on all operations and particularly near pavement edges to avoid damage to edge lights and all underground electrical cable on the airport. The approximate location of existing underground cable is shown on drawings. Any airfield lights or cable that are broken and require replacement because of the Contractor's operations will be replaced by the contractor at his own expense.

Any airfield cable repairs or replacement to any part of the electrical system made necessary by the Contractor's operations will be made by him in the manner specified in Sections 108 and 125 at no cost to the airport. Cost of replacement to be borne by the Contractor shall include any expense incurred in locating as well as repairing or replacing damaged parts of the system by the owning agency.

It shall be the Contractor’s responsibility to locate and protect all airport-owned utilities within the construction limits. This includes all electrical cables, storm sewer, drain tile, sanitary sewer and water main.

Special attention is necessary when working near FAA power and control cables. Any FAA utility that is damaged or cut during construction shall be repaired immediately. FAA requires that any damaged cable be replaced in its entirety, no splices will be permitted. No additional compensation will be made for replacement or repair of FAA facilities or cables but, shall be incidental to the contract.

Should any utilities or cables require location, the following people shall be contacted:

AURORA MUNICIPAL AIRPORT		
<u>Utility Service or Facility</u>	<u>Contact (Person)</u>	<u>Contact (Phone)</u>
AT&T – Telephone Cables	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	811 or 1-800-892-0123
ComEd - Electric Cables	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	811 or 1-800-892-0123
NICOR - Gas Lines	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	811 or 1-800-892-0123
Water	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	811 or 1-800-892-0123
FAA Control and Communication Cables	FAA Sector Office	1-630-587-7801

70-26 CONTRACTOR’S RESPONSIBILITY FOR SAFETY DURING CONSTRUCTION

ADD the following after Item D.:

- E. Provide a safety officer/construction inspector trained in airport safety to monitor construction activities.
- F. Restrict movement of construction vehicles to construction areas with flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate or as shown in plans.
- G. Ensure that no construction employees, employees of subcontractors or suppliers, or other persons enter any part of the aircraft operations area from construction site unless authorized.

SECTION 80 – PROSECUTION AND PROGRESS

80-03 NOTICE TO PROCEED

ADD:

The Notice to Proceed will not be given until all materials are certified by the Contractor to be available and on hand.

80-05 LIMITATION OF OPERATIONS

ADD:

The Contractor shall not have access to any part of the active airfield (runways or taxiways) for any equipment or personnel without approval of the Airport Manager.

80-07 TEMPORARY SUSPENSION OF THE WORK

REVISE the second paragraph to read:

In the event that the Contractor is ordered by the Engineer to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Resident Engineer within the time period stated in the Engineer's order to resume work. The Contractor shall submit with his/her claim information substantiating the amount shown on the claim. The Resident Engineer will forward the Contractor's claim to the Division for the consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather, for suspension made at the request of the Engineer, or for any other delay provided for in the contract, plans, or specifications.

SECTION 90 – MEASUREMENT AND PAYMENT

90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK

ADD the following to subsection B.7. Statements:

All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after completion of the force account work. If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Division, Airport Owner and Local Sponsor are released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery.

DIVISION VI - LIGHTING INSTALLATION

ITEM 108 – INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

DESCRIPTION

108-1.1

DELETE: The 3rd sentence of the first paragraph.

ADD:

This item of work shall consist of the underground installation of fiber optic cable in existing and new GRS conduit or duct bank at the locations shown on the plans and in accordance with these specifications.

This item shall also consist of 5000 V airfield lighting cables, 600 V power and control wires and data/communication cables inside the vault and ATCT for new ALCMS.

Contractor shall label and tag all airfield and fiber optic cables in ducts, manholes and handholes as directed by the Engineer. All costs of labelling and tagging shall be considered incidental to the contract unit price for the associated item.

EQUIPMENT AND MATERIALS

108-2.1 GENERAL

ADD:

Airfield Lighting and Fiber Optic cable under this item shall be:

- L-824, 1/C #8, 5,000 V, Type C
- 12 Strand Multi-Mode Fiber Optic Cable
- 24 AWG Shielded Twisted Pair

108-2.4 CABLE CONNECTIONS

DELETE: The first and second sentence of paragraph **D. The Taped or Heat-Shrunked Splice**.

ADD:

To further reduce the possibility of water (moisture) entrance into the connector between the cable and the field attached connector, heat shrinkable tubing with interior adhesive shall be applied over all cable connections.

The heat shrinkable tubing shall cover the entire L-823 connector. All connections shall be at manholes or light bases. No direct burial splicing will be allowed.

No splices will be allowed in the new cable unless at the end of a spool of cable. Splices due to termination points shall be done in splice cans, manholes, handholes and light cans. Any repairs necessary to cable damaged during installation shall be done at the Contractor's expense and shall consist of replacing the entire length of damaged cable between pull points.

In line connections for existing cables to be spliced or those which are cut during construction shall be repaired with the cast splice kit. The Contractor shall have a minimum of five (5) splice kits on the jobsite at all times for emergency repairs. Splice markers shall be installed over each splice in cables not to be abandoned. Cast splice kits shall be as specified in paragraph (a). All field splices shall be covered with a flexible polyolefin heat-shrinkable sleeve.

108-2.14 FIBER OPTIC CABLE

Fiber optic cable shall be 12 strand multi-mode, 62.5/125 micron core/cladding, with attenuation at 850 nm; 3.5 dB/km 220 MHz-km and at 1310 nm; 1.0 dB/km 500 MHz-km. Fiber optic cable shall be 12 Fiber Construction around center strength member and elastomeric PVC black outer jacket suitable for indoor or outdoor use.

Furnish and install fiber optic terminators (connectors) style SC or ST as required to match equipment. Connectors shall be designed for field assembly and be self-aligning and self-centering. Comply with manufacturers requirements. Include terminators on all fibers, including spares.

Splice closures shall protect the spliced fibers from moisture and to prevent physical damage. The splice closure shall provide strain relief for the cable and the fibers at the splice points.

CONSTRUCTION METHODS

108-3.1 GENERAL

ADD:

Any damages to existing utilities as a result of the Contractor's operations shall be repaired immediately at his expense.

108-3.5 SPLICING

DELETE: The first and second paragraph of Section **D. Taped or Heat-Shrunked Splices**.

ADD:

Contractor shall use cast splicing kits as described in Article 108-2.4 for any splices made inside the electric handholes and manholes. The cast splicing kit shall be series 82-B1 Scotch cast or 90-B1 Scotch cast as manufactured by 3M or equal. Contractor shall provide shop drawing for splicing method and cast splicing kit. Contractor shall also leave minimum 30" of slack on each side of the cable being spliced.

Splicing of FAA cables shall be tested and approved by FAA.

108-3.10 LOCATING OF EXISTING CABLES

ADD:

Contact Personnel are listed in Section 70-17 herein.

108-3.11 TERMINATIONS AND CONNECTIONS

REVISE: In paragraph 3, the number of splice kits required on site from two (2) to five (5).

ADD:

If, due to the length of spool ordered by the Contractor, it is necessary to install additional handholes, the Contractor shall supply same at no additional cost to the project. The handhole shall be the size as directed by the Engineer.

108-3.12 INSTALLATION OF FIBER OPTIC CABLE

Unless noted otherwise, all conduits, ducts, and manholes for FO cable systems shall be installed as shown on drawings.

- A. No splices shall be permitted unless the length of cable being installed exceeds the maximum standard cable length available from manufacturer.
- B. Splices shall be made using the method recommended by the cable manufacturer. Splices shall be housed in a splice enclosure and shall be encapsulated with an epoxy or ultraviolet light cured splice encapsulant. All FO splices shall be field tested at the time of splicing. Fusion splices shall have less than 0.2 dB loss, and mechanical splices shall not be used. There shall be no more than one (1) splice per kilometer in any of the FO cables excluding terminations. All field splices shall be located in cable boxes. Sufficient cable shall be provided in each splicing location to properly splice the cables, and to provide extra cable for additional splices. All cable ends shall be protected at all times with end caps except during actual splicing. During the splicing operations, means shall be provided to protect the unspliced portions of the cable from the intrusion of moisture and other foreign matter. All splices shall be done in hand holes provided and installed by the Contractor as required.
- C. For cable installed in ducts and conduit, a cable lubricant compatible with the cable sheathing material shall be used on all cables pulled. Pulling fixtures shall be attached to the cable strength members. If indirect attachments are used, the grip diameter and length shall be matched to the cable diameter and characteristics. If indirect attachment is used on cables having only central strength members, the pulling forces shall be reduced to ensure that the fibers are not damaged from forces being transmitted to the strength member. DURING PULLING, THE CABLE PULL LINE TENSION SHALL BE CONTINUOUSLY MONITORED, AND SHALL NOT EXCEED THE MAXIMUM TENSION AS GIVEN BY THE CABLE MANUFACTURER. The mechanical stress placed upon a cable during installation shall be such that the cable is not twisted or stretched. A cable feeder guide shall be used between the cable reel and the face of the duct or conduit to protect the cable and guide it into the duct or conduit as it is pulled off the reel. As the cable is pulled off the reel, it shall be carefully inspected for jacket defects. Precautions shall be taken during installation to prevent the cable from being kinked or crushed and that the minimum bend radius of the cable is not exceeded at any time. Cable shall be hand fed and guided through each manhole and additional lubricant shall be applied at all intermediate manholes. When practicable, the center pulling technique shall be used to lower pulling tension. That is, the cable shall be pulled from the center point of the cable run towards the end termination points. The method may require the cable to be pulled in successive pulls. If the cable is pulled out of a junction box or manhole, the cable shall be protected from dirt and moisture by laying the cable on a ground covering. Dynamometers or load-cell instruments shall be used to ensure that the pulling line tension does not exceed the installation tension value specified by the cable manufacturer. The mechanical stress placed upon a cable during installation shall be such that the cable is not twisted or stretched.

108-3.13 CONNECTION AND TERMINATION OF FIBER OPTIC CABLE

- A. Connectors: All fibers at each end of the cable shall have jumpers or pigtails installed of not less than 3 feet in length. All fibers at both ends of the cable shall have connectors

installed on the jumpers. The mated pair loss, without rotational optimization shall not exceed 1.5 dB. The pull strength between the connector and the attached fiber shall not be less than 50 pounds.

- B. Identification and Labeling: The Contractor shall supply identification tags or labels for each cable. The labeling format shall be identified, and complete record shall be provided to the Owner with the final documentation. Each cable shall be identified with type of signal being carried and termination points.

108-3.14 TESTING OF FIBER OPTIC CABLE

- A. An optical time domain reflectometer (TDR) test shall be performed at 820 nanometers, of the FO cable on the reel prior to installation. The optical time domain reflectometer shall be calibrated to show anomalies of 0.2 dB as a minimum. Test data shall be recorded and furnished to the Engineer. Cable tested with losses exceeding manufacturer's acceptable levels for new cable shall be rejected.
- B. A second time domain reflectometer test at 820 nanometers shall be performed on the FO cable after it is installed. The optical time domain reflectometer shall be calibrated to show anomalies of 0.2 dB as a minimum. If the optical time domain reflectometer test results are unsatisfactory, the FO cable segment is unacceptable.
- C. The unsatisfactory segments of cable shall be replaced with a new segment of cable at no cost to the Contract. The new segment of cable shall then be tested to demonstrate acceptability

METHOD OF MEASUREMENT

108-4.1

DELETE: This Section.

108-4.2

REVISE: This Section to read as follows.

The length of FIBER OPTIC CABLE installed in existing and new duct bank and/or conduit shall be the number of lineal feet measured in place, completed and ready for operation, and accepted as satisfactory, and no extra quantity will be allotted for any vertical distances or the required cable slack, as stated under Item 108-3.3, in the Standard Specifications.

The cost of cable slack in handholes and manholes and the cost of routing the cable through duct, splicing, marking, trenching, backfilling, and all connections shall be included in the unit price bid for the cable and shall not be measured separately.

The cost of removing fiber optic cable from existing conduits to install new fiber optic cabling shall not be measured separately for payment but shall be considered incidental to the unit bid price for the cable.

The cost of installation of fiber optic cable, 24 AWG shielded twisted pair, 5,000 V airfield lighting cables, 600 V power and control cables and data/communication installed inside the Vault, inside the ATCT and from the Vault to the Generator shall not be measured separately for payment but shall be considered incidental to the unit bid price for Vault ALCMS Modifications and ATCT ALCMS Modifications.

BASIS OF PAYMENT

108-5.1

REVISE: This Section to read as follows:

The fiber optic cables measured under Item 108-4.2 shall be paid for under this item. These prices shall be full compensation for furnishing all materials and for all preparation and installation of these materials, trenching, backfilling and compacting trenches, all connections, line marking tape, cable slack and installation, and for all labor, equipment, tools and incidentals necessary to complete these items. The line marking tape installed shall be considered incidental to the work and shall not be paid for separately.

Payment will be made under:

ITEM AR800178 FIBER OPTIC CABLE - PER LINEAR FOOT

DIVISION VIII – MISCELLANEOUS

ITEM 800 AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS)

DESCRIPTION

800-1.1

This item shall consist of the new Airfield Lighting Control and Monitoring Systems (ALCMS) as shown on the plans and specified herein. This work shall also include the removal of existing ALCMS and ALCMS components; coordination with existing regulator; marking and labeling of equipment and the labeling or tagging of wires; the testing of the installation; commissioning of the system; and the furnishing of all conduit, cable and incidentals necessary to place it in operating condition as a completed unit to the satisfaction of the Engineer.

EQUIPMENT AND MATERIALS

800-2.1 GENERAL

PROOF OF BUY AMERICAN NOTICE: All tier contractors and subcontractors shall provide proof of Buy American compliance for all manufactured products in accordance with statutes established under Title 49 U.S.C. Section 50101. The AIP Buy American preference does not recognize US trade agreements such as NAFTA. If, upon submittal sufficient information to confirm compliance is not included, the submittal will be returned with no action.

Equipment shall comply with the following:

- A. Airport lighting equipment and materials covered by advisory circulars (AC) shall be certified and listed in AC 150/5345-53, Airport Lighting Equipment Certification Program.
- 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 when requested by the Engineer.
- C. Manufacturer's certifications shall not relieve the Contractor of the responsibility to provide materials per these specifications. Materials supplied and/or installed that do not comply with these specifications shall be removed (when directed by the Engineer) and replaced with materials that comply with these specifications at the Contractor's cost.
- D. All materials and equipment used to construct this item shall be submitted to the Engineer for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify products or models applicable to this project. Indicate all optional equipment and delete any non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment to which they apply on each submittal sheet. Markings shall be made bold and clear with arrows or circles (highlighting is not acceptable). The Contractor is solely responsible for delays in the project that may accrue directly or indirectly from late submissions or

- resubmissions of submittals.
- E. The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the plans and specifications. The Contractor's submittals shall be neatly bound in a properly sized 3-ring binder, tabbed by specification section. The Engineer reserves the right to reject any and all equipment, materials or procedures that do not meet the system design and the standards and codes, specified in this document.
 - F. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.
 - G. Contractor shall supply spare parts as recommend by the manufacturer. The value of the spare parts shall not exceed 10% of the total cost for the ALCMS L-890 System or \$10,000, whichever is less.

800-2.2 FAA-APPROVED EQUIPMENT

Certain items of airport lighting equipment installed in vaults are covered by individual ACs listed below:

AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-10	Specification for Constant Current Regulators and Regulator Monitors
AC 150/5345-13	Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits.
AC 150/5345-49	Specification for L-854, Radio Control Equipment
AC 150/5345-56 (ALCMS)	Specification for L-890 Airport Lighting Control and Monitoring System (latest edition)

800-2.3 OTHER ELECTRICAL EQUIPMENT

Relays, terminal blocks, transfer relays, circuit breakers, and all other regularly used commercial items of electrical equipment not covered by FAA equipment specifications and ACs shall conform to the applicable rulings and standards of the Institute of Electrical and Electronic Engineers (IEEE) or the National Electrical Manufacturers Association (NEMA). When specified, test reports from a testing laboratory indicating that the equipment meets the specifications shall be supplied. In all cases, equipment shall be new and a first-grade product. This equipment shall be supplied in the quantities required for the specific project and shall incorporate the electrical and mechanical characteristics specified in the proposal and plans. Equipment selected and installed by the Contractor shall maintain the interrupting current rating of the existing systems or specified rating whichever is greater.

800-2.4 WIRE

Wire (in conduit) rated up to 5,000 volts shall be per AC 150/5345-7, Specification for L-824 Underground Electrical Cables for Airport Lighting Circuits. For ratings up to 600 volts, moisture and heat resistant thermoplastic wire conforming to Commercial Item Description A-A-59544A Type THWN-2 shall be used. The wires shall be of the type, size, number of conductors, and voltage shown in the plans or in the proposal. All wires shall be in conformance with Item 108 of the Standard Specifications for Construction of Airports.

- A. Control circuits. Unless otherwise indicated on the plans, wire shall be not less than No. 12

American wire gauge (AWG) and shall be insulated for 600 volts. If telephone control cable is specified, No. 19 AWG telephone cable per ANSI/Insulated Cable Engineers Association (ICEA) S-85-625-2007 specifications shall be used.

B. Power circuits.

- (1) 600 volts maximum-Wire shall be No. 6 AWG or larger and insulated for at least 600 volts.
- (2) 3,000 volts maximum-Wire shall be No. 6 AWG or larger and insulated for at least 3,000 volts.
- (3) Over 3,000 volts-Wire shall be No. 6 AWG or larger and insulated for at least the circuit voltage.

800-2.5 CONDUIT

Unless otherwise indicated on the plans. Conduit shall be galvanized rigid steel in accordance with Item 110 of the Standard Specifications for Construction of Airports.

800-2.6 AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS)

ALCMS shall be FAA approved L-890 system as detailed on the plans and specified herein. The Airfield Lighting Control and Monitoring System (ALCMS) shall combine state-of-the-art programming intelligence with high quality industrial strength components.

- A. The system shall represent the leading edge in aviation lighting technology with innovative Touchscreen control stations; distributed control and monitoring; and powerful database storage and retrieval systems.
- B. The ALCMS manufacturer shall be ISO 9001 certified and provide a copy of the ISO certification during the submittal process.
- C. The ALCMS manufacturer shall be listed in the FAA Approved Equipment List, AC 150/5345-53 (current edition), be a FAA approved supplier of L-890 Airfield Lighting Control and Monitoring and Monitoring Systems in accordance with AC 150/5345-56 (current edition), and be a FAA approved supplier of Constant Current Regulator Monitors in accordance with AC 150/5345-10 (current edition).
- D. The ALCMS manufacturer shall have a minimum of five (5) years of experience in computerized airfield lighting control and monitoring systems and shall have installed at least five (5) advanced control and monitoring systems of similar size and complexity to the one specified herein.
- E. The ALCMS Manufacturer shall furnish and commission a complete and functional computerized distributed control and monitoring airfield lighting system based on an industry standard Ethernet network.
- F. This project shall include software, programming, computers, manuals, on-site commissioning, on-site testing, on-site training and any other materials, tools and equipment to provide a fully functional system to the satisfaction of the Engineer.
- G. The ALCMS Manufacturer shall provide an experienced and qualified Engineering, Sales and Service staff to support the contractor and airport throughout the installation and life of the system.
 - I. The project shall follow this basic cycle of events:

Item	Milestone	Description
1.	Submittal	The ALCMS Manufacturer shall submit ALCMS specifications to the contractor.
2.	Submittal, Review and Approval	Submittal is reviewed by the contractor, airport, and engineer.
3.	Production Release	The ALCMS Manufacturer shall release approved system to manufacturing.
4.	Demo CD 35% Software Completion	The ALCMS Manufacturer shall send to the contractor, airport, and engineers a Demo CD of the planned layout of the touchscreen that will be used for the control of the ALCMS system.
5.	Production	System is manufactured.
6.	Production Testing	System is tested by the ALCMS Manufacturer.
7.	Factory Acceptance Testing	System is available for Factory Acceptance Testing (FAT) witnessed by airport/engineer, if desired by the airport.
8.	Shipment of system	Approved system is shipped to installation site.
9.	Installation	Contractor installs equipment and completes external wiring.
10.	Commissioning	The ALCMS Manufacturer shall arrive at installation site to complete commissioning of system and verify contractor installation and wiring.
11.	System Cut-over	The ALCMS Manufacturer and Contractor shall cut over the new system and bring it on-line and operational.
12.	System Acceptance Testing	System is available for System Acceptance Testing (SAT) which shall be witnessed the by airport and/or engineer.
13.	Manuals / As-Built drawings	The ALCMS Manufacturer shall issue three (3) copies each of operator manuals, maintenance manuals and ATC manuals and final as-built drawings.
14.	On-Site Training	The ALCMS Manufacturer shall complete on-site training of maintenance, Operations, and ATC personnel.
15.	Final Owner Acceptance	Upon completion of all contractual requirements, system is accepted in writing by the airport/engineer.
16.	Warranty and Support	The ALCMS Manufacturer shall provide warranty and support per the contractual requirements.

Factory Acceptance Test (FAT)

- A. Before shipment, the ALCMS system shall be assembled as an operating system at the ALCMS Manufacturer's test facilities.

- B. The ALCMS Manufacturer shall make the FAT available for representative(s) of the airport and engineer to witness the testing of the system.
- C. At a minimum, the FAT shall allow for one (1) day of testing and review, but may require additional time depending on the results of the testing.
- D. The ALCMS Manufacturer shall incur the costs of setting up and performing the test excluding airport and engineer related travel and accommodations.
- E. During the FAT, minor software comments shall be finalized and incorporated into the final system.

On Site Commissioning and System Acceptance Test (SAT)

The ALCMS manufacturer shall perform complete onsite commission and system readiness checks. A witnessed system acceptance test shall be performed onsite by ALCMS manufacturer to be witnessed by airport/owner representative and contractor. Copies of the SAT shall be provided.

ATC Training

ATC training shall be provided during the commissioning of the system for ATCT personnel. Training shall be scheduled with FAA, training shall be minimum of (2) two-hour sessions at the tower.

Maintenance Training

Maintenance training shall be provided during the commissioning of the system for ATCT personnel. Training shall be scheduled with Airport maintenance and management staff, training shall be minimum of (2) 4-hour sessions at the airfield lighting vault.

ALCMS Equipment and Materials

- A. The ALCMS system shall be based on a network ready system that operates within a Windows 7™ operating environment.
- B. The ALCMS shall be a PC-based system and shall not use any Programmable Logic Controller (PLC) components for control or monitoring.
- C. An Ethernet communication network via fiber optic shall be used for data transfer between the electrical vault and control tower.
- D. The computerized airfield lighting control and monitoring system shall consist of the following major hardware components:
 - 1. Touchscreen control station located in the tower cab.
 - 2. Tower computer subsystem consisting of an industrial enclosure, industrial tower computer and communication equipment. The tower enclosure shall be the same size or smaller than the existing cabinet located on the third floor.
 - 3. Vault computer subsystem consisting of an industrial enclosure, industrial vault computer, Laser Jet Printer, communication equipment, and a redundant vault control / monitoring network.
 - 4. Maintenance laptop with ALCMS software for maintenance and operations via cellular network.
- E. A distributed control and monitoring system which operates on a redundant communication network shall be located within the airfield lighting vault.

- F. The Distributed Control and Monitoring Equipment (DCME) shall be of a distributed nature that shall be installed locally at each controlled element within the vault. The vault industrial computer communicates to each DCME via two (2) shielded cables each consisting of two (2) twisted pairs or as recommended by the ALCMS manufacturer.
- G. The system shall monitor the operation of the various lighting systems per AC 150/5345-10 (current edition) requirements.
- H. Furnish and install ALL required CT's and interface modules for existing Honeywell, Liberty, Crouse-Hinds and Hevi-Duty regulators for a fully functional L-829 and L-890 system.
- I. Install new communication network using fiber optic and data cables in existing Tower and Vault as shown on the plans.

Communication Network

- A. The tower and electrical vault computer shall communicate with each other via multi-mode fiber optic communication networks. The maintenance laptop shall communicate with vault ALCMS via cellular network.
- B. The fiber optic cables shall be multi-mode, 850nm wavelength, 62.5/125 micron fiber cable. Each fiber communication link requires 2 fibers as specified in specifications L-108.
- C. All fiber optic cable shall be terminated at a fiber optic patch panel within each subsystem before being terminated at the communication equipment.
- D. Fiber optic jumper cables shall be provided from the fiber patch panel to the computer equipment enclosures.
- E. Fiber optic cable shall be terminated with ST style connectors at the fiber optic transceivers located within the vault computer cabinet.
- F. Fiber optic runs shall be direct point-point runs with no splices.

Computers

Industrial Computer

- A. All the industrial-grade computers in the ALCMS system are identical and have the following technical specifications:

Item	Options	Description
a)	Type	Industrial-grade computer (Advantech)
b)	Processor Type	Quadcore, dual bay with Windows 7
c)	Processor Clock Rate	4 GHz or better
d)	Memory Capacity	1 GB RAM
e)	Hard Drive (Primary)	RAID 1, 120.0 GB, IDE, Western Digital 1200SB
f)	Hard Drive (Sec.)	RAID 1, 120.0 GB, IDE, Western Digital 1200SB
g)	Diskette Drive	1.44 MB, 3.5"
h)	Promise	Fastrack 100 PRO Kit
i)	Cache Memory	L2 512KB
j)	CD-ROM	52X
k)	Video (Integrated)	SVGA, 8MB VRAM, minimum support 1280 x 1024
l)	Operating System	Window 7™
m)	Dual Port USB Breakout	1700100170

Table 1: Industrial Computer Specifications

- B. All the industrial-grade computers in the ALCMS system shall be designed using a slot board computer.
1. The computer back plane shall be passive, meaning a motherboard and daughter-board design is not acceptable.
 2. The central processing unit (CPU) shall be on a slot board type card that is installed on the back plane of the computer chassis.
 3. CPU upgrades shall be as simple as replacing the CPU of the slot board or removing the slot board card and plugging in a new one.
 4. To ensure stability, the slot board computers shall have undergone a 140°F (60°C) dynamic burn-in test.
 5. The slot board computer shall be designed to withstand harsh environmental conditions like shock, vibration, power surges and fluctuations, heavy dust, and extreme temperatures.

Vault Computer

- A. The vault computer shall be capable of independently carrying out the following functions:
1. Decode all commands received and transfer them to the corresponding Distributed Control and Monitoring Equipment (DCME) unit for execution.

2. Interrogate all the DCME units to determine the status of the Constant Current Regulators (CCRs) and other controllable items.
3. Transfer the status of the CCRs and other controllable items to the control tower computer and maintenance center computer.
4. Continuously check for proper operation of all the communication links connected to the computer.
5. Continuously check for proper operation of the vault distributed control and monitoring network.
6. Duplicate the tower control and graphical displays for allowing authorized control from the vaults.
7. The vault shall also duplicate the maintenance center status information.
8. Provide hard copies of real-time and historical information on the status of the airfield lighting systems and other controlled and monitored items.
9. The vault computer application shall not be able to initiate lighting commands unless the control tower authorizes control to Vault.
10. Provide remote dial-in and diagnostics for the ALCMS manufacturer technical service personnel.

Tower Computers

- A. The Tower computers shall be capable of independently carrying out the following functions:
 1. Receive commands from the Touchscreen control stations and transfer lighting control commands to the vaults for execution.
 2. Receive the airfield lighting status information from the vaults and transfer the status to the Touchscreen display.

Touchscreen Control Stations

Technical Specifications

- A. Touchscreen technology shall be integrated into the display monitor and shall have the following technical specifications:

Item	Options	Description
a.	Technology	AccuTouch™ Five-Wire Resistive
b.	Screen Resolution	1280 x 1024 (minimum)
c.	Touch Resolution	Touchpoint controller resolution of 4096 x 4096
d.	Input method	Finger or stylus
e.	Positional Accuracy	Standard deviation error less than 0.080" (2mm)
f.	Agency Approvals	UL, CE, FCC Class A
g.	Chemical Resistance	The active area of the Touchscreen is resistant to all chemicals that do not affect glass.
h.	Temperature/Relative Humidity	-10°C to 50°C at 90% RH, non-condensing
i.	Electrostatic	Per EN 61000-4-2
j.	Light Transmission	80% +/- 5% at 550nm wavelength
k.	Face Plate	Anti-glare
l.	Expected Life	35 million touches in one location without failure

Touchscreen Monitor Specifications

A. The touchscreen video graphics display shall have the following technical specifications:

Options	Description
Type	LCD, active matrix
Mounting	Flush Mount
Size	19" Diagonal viewable
Screen Resolution	1280 x 1024 (minimum)

B. Installation of the touchscreen and all cabinetry work and modifications is the responsibility of the Contractor.

C. The Contractor shall install to match existing cabinet construction and color.

Subsystem Equipment

Tower Equipment

- A. Computer:
 - 1. The Tower computer shall be a 19" industrial rack-mount type.
 - 2. The computers shall meet previously specified technical requirements.
 - 3. 120 VAC, uninterruptible power shall be supplied to the computer and the Tower Touchscreen Monitor.
- B. Touchscreen Monitors:
 - 1. Touchscreen shall be mounted in the Tower cab console.
 - 2. 120 VAC, uninterruptible power shall be supplied to the Tower Touchscreen.
- C. Video / Serial Communication Extension Equipment:
 - 1. A Video/Serial Communication extension Receiver box shall be installed in conjunction with each Touchscreen display under the tower cab console.
 - 2. A Video/Serial Communication extension Transmitter box shall be installed in conjunction with the tower computer located in the tower sub-junction.
 - 3. The video extension transmitter shall allow for simultaneous connection of the local service monitor and the remote touchscreen monitor.
 - 4. A category 6 communications cable shall be installed between the Receiver and Transmitter.
- D. Service Monitor (LCD):
 - 1. The service display shall use a 17" LCD monitor.
 - 2. The monitor shall be located on a shelf within the tower equipment enclosure.
 - 3. 120 VAC, uninterruptible power shall be supplied to the monitor.
- E. Audible Alarm assembly:
 - 1. An audible speaker shall be installed in conjunction with each Touchscreen display.
 - 2. An audio and volume control cable shall be installed between the audible speaker and the tower computer located in the tower sub-junction.
- F. Uninterruptible Power System:
 - 1. An uninterruptible power system (UPS) shall be provided for supporting power to the tower equipment.
 - 2. The UPS shall be capable of supplying full load power for 10 minutes after loss of main input power.
 - 3. The UPS shall be a 19" rack-mount unit installed in the tower computer equipment enclosure.
- G. Industrial Enclosures:
 - 1. A NEMA 12 industrial enclosure shall be provided for housing associated tower computer equipment.
 - 2. The enclosure shall be designed for indoor use to provide protection against dust, dirt, dripping water and external condensation of non-corrosive liquids.

3. The enclosure shall be an industry standard 19" rack-mount type enclosure.
4. The industrial enclosure shall include a pagoda top with exhaust fan and ventilation kit for proper convection cooling.
5. The environmental conditions within the area of the enclosure installation shall not exceed 122°F (50°C) or fall below 32°F (0°C).
6. Installation of the tower equipment shall be the responsibility of the electrical contractor. The electrical contractor with the airport, engineer and/or owner shall coordinate the installation and location of the tower equipment with the FAA.

Vault Equipment

A. Computer:

1. The vault and SRS computer shall be a 19" industrial rack-mount type.
2. The computers shall meet previously specified technical requirements.
3. 120 VAC, uninterruptible power shall be supplied to the computer.

B. Monitor:

1. The service display shall use a 17" LCD monitor.
2. The monitor shall be located on a shelf within the vault equipment enclosure.
3. 120 VAC, uninterruptible power shall be supplied to the monitor.

C. Uninterruptible Power System: Vault Computer Equipment

1. An uninterruptible power system (UPS) shall be provided for supporting power to the vault and SRE equipment.
2. The UPS shall be capable of supplying full load power for 10 minutes after loss of main input power.
3. The UPS shall be a 19" rack-mount unit installed in the vault computer equipment enclosure.

D. Uninterruptible Power System: DCME Control and Monitoring Equipment (vault only)

1. An uninterruptible power system (UPS) shall be provided for supporting power to the DCME equipment.
2. The UPS shall be capable of supplying full load power for 10 minutes after loss of main input power.
3. The UPS shall be a 19" rack-mount unit installed in the vault computer equipment enclosure.

E. Industrial Enclosures

1. A NEMA 12 industrial enclosure shall be provided for housing associated tower computer equipment.
2. The enclosure is designed for indoor use to provide protection against dust, dirt, dripping water, and external condensation of non-corrosive liquids.
3. The enclosure shall be an industry standard 19" rack-mount type enclosure.
4. The industrial enclosure shall include a pagoda top with exhaust fan and ventilation kit for proper convection cooling.

- F. The environmental conditions within the area of the enclosure installation shall not exceed 122°F (50°C) or fall below 32°F (0°C).
- G. Printer:
 - 1. The printer shall be a black and white Laser Jet Printer. The printer shall be located on a shelf within the vault and SRE equipment enclosures.

Distributed Control Equipment

- A. The control and monitoring equipment shall be of a distributed nature and shall not be PLC based.
- B. The DCME units shall be installed locally at each device (i.e. CCR) which requires control and/or monitoring within the airfield lighting electrical vault.
- C. The DCME unit shall also house Insulation Resistance Measurement System (IRMS) as shown on the plans.

General

- A. Each CCR and each controllable item shall be connected to a DCME.
- B. The DCME shall be a microprocessor-based module that includes all of the communication, control commands, input/output connections and failsafe functionality.
- C. The DCME shall communicate via a redundant (2 independent communication links) communications network.

Connections to the communication network shall be via quick disconnect terminal connectors that can easily be plugged and unplugged from the communication equipment.

- A. The DCME shall communicate back to the Vault computer via either of the networks.
- B. Removal of any DCME units from the vault network shall not affect the operation of the ALCMS system.
- C. The DCME shall be a universal device that can be used on any type of CCR and/or controlled element from any manufacturer.
- D. Each DCME shall be identical and have interchangeable components.
- E. The DCME unit shall provide optical isolation from all high voltage equipment including the CCR output current, CCR output voltage and CCR input voltage.
- F. All high voltage interfaces to the DCME unit shall be via fiber optic cable.
- G. Furnish and install ALL required CT's and interface modules for existing Honeywell, Liberty, Crouse-Hinds and Hevi-Duty regulators for a fully functional L-829 and L-890 system.

Redundant Vault Control Network

- A. The DCME redundant communication network shall use two (2) independent communication network cables installed in the electrical vault.
- B. The vault network shall use two (2) cables each consisting of two (2), 24AWG, shielded twisted pairs with a common (drain wire) meeting EIA RS-485 applications (Belden™ no. 9842) or an ALCMS manufacturer approved equivalent.
- C. The network shall be used to control and monitor all the various controllable elements located within the vault such as CCRs, Beacon, windcone, REILS, PAPI's and Generator.

- D. Any malfunction in one network shall not affect the operation of the other communications network.
- E. Any malfunction in one of the DCME communication ports shall transfer communication to the remaining port without affecting system functions.

Overview of Operation

- A. Each DCME unit shall have a unique factory set address and a field programmable communication address.
- B. The DCME receives commands via the vault network, executes those commands, and transfers back the status of the element to the vault computer.
- C. The DCME shall perform the following functions:
 - 1. Brightness setting control of the CCRs or ON/OFF control as required by the controlled element (i.e. generator may only require ON/OFF control).
 - 2. Perform all failsafe functions.
 - 3. Communication via both networks to the vault computer.
 - 4. Self-diagnostic function to monitor for proper operation.
 - 5. Locally store all data and parameters specific to the controlled element.
- D. For maintenance purposes, the DCME shall have an internal ON/OFF switch and shall have a front hinged access door.

Basic DCME components

The DCME shall consist of the following basic components and functions:

- A. Input / Output Board
 - 1. Shall provide eight (8) mechanical latching output points. These control points shall also be self-monitored and provide back-indication to the Vault computer verifying proper execution of the control command.
 - 2. Shall provide eight (8) optical-isolated input points.
 - 3. Shall provide quick-disconnect terminal blocks that can be easily plugged and unplugged from the I/O board.
- B. Monitor Board
 - 1. Shall provide redundant communication network circuitry.
 - 2. Shall provide quick-disconnect terminal blocks for redundant communication network connections.
 - 3. Receives and transmits data to the vault computer.
- C. Digital Display
 - 1. Shall provide visual LED display of DCME status (Power, communications and monitoring).
 - 2. Brightness Step: LED display indicating the commanded step of the CCR.
 - 3. Channel A: LED display indicating the status of channel A of the redundant communication network.
 - 4. Channel B: LED display indicating the status of channel B of the redundant communication network.

5. Ability to put the DCME into a “cycle mode” which alternately displays all monitored parameters.

Distributed Monitoring Equipment

The DCME shall provide the following minimum monitoring:

L-829 Monitoring

- A. The DCME unit shall provide full FAA L-829 monitoring per FAA AC 150/5345-10 (current edition).
- B. The DCME shall include the monitoring board and provide the following information for each CCR:
 1. Loss of input power to the CCR.
 2. CCR shutdown by open-circuit/over-current protective devices.
 3. Drop of more than 10% in the CCR VA load.
 4. Failure of the CCR to deliver the selected output current.
 5. The number of burnt-out lamps (L-850, L-852, L-861, L-861 series) in each series circuit. For best accuracy, all lamps/transformers are the same wattage and no film disc cutouts are used.
 6. Remote/Local status of the CCR.
 7. Actual CCR output current
 8. Actual CCR output voltage
 9. Actual CCR output load wattage (W)
 10. Actual CCR output load Volts-Amps (VA)
- C. The DCME digital display shall provide local indication of the CCR status including
 1. Remote/Local: LED display indicating the status of the remote / local switch of the CCR.
 2. Primary Power: LED display indicating the status of the input power to the CCR.
 3. Over current: LED display indicating over current, protective shutdown.
 4. Open circuit: LED display indicating open circuit status.
- D. The DCME shall interface to an external current and voltage module (CVM) used to collect current and voltage information. The CVM shall meet the following minimum requirements.
 1. Collects analog current and voltage samples at a high sample rate of 50,000 samples/second.
 2. Transmits current and voltage samples to the DCME.
 3. Provide digital fiber optical isolation between the DCME and the output of the CCR.
 4. Quick disconnect fiber optic connections for interfacing to the DCME.

The ALCMS manufacturer shall provide the fiber optic cable between the CVM and the DCME.

Insulation Resistance Monitoring

- A. The DCME unit shall provide insulation resistance monitoring as an integral component of the DCME unit.

- B. The IRMS is capable of automatically or manually monitoring and reporting the insulation resistance value of the series circuit cabling (one IRMS per circuit).
- C. The measured resistance shall be displayed locally at the DCME digital display.
- D. The DCME unit shall be capable of reading and recording resistance values from less than 20k Ohms to 2G Ohms.
- E. The DCME shall interface to an external insulation resistance module (IRM). The IRM shall meet the following minimum requirements.
 - 1. Collects insulation resistance samples.
 - 2. Transmits insulation resistance samples to the DCME.
 - 3. Provide digital fiber optical isolation between the DCME and the output of the CCR.
 - 4. Quick disconnect fiber optic connections for interfacing to the DCME.

The ALCMS manufacturer shall provide the fiber optic cables between the IRM board and the DCME.

- A. The IRMS system shall be capable of taking resistance readings on circuits that are energized or de-energized. This shall allow the system to be used as a troubleshooting tool for assisting in locating circuit faults.
- B. The IRMS system shall provide database record keeping that allows for graphical trend analysis of the insulation resistance readings.
- C. The IRMS shall provide configurable insulation resistance warning and alarm limit notification to the system.
- D. The IRMS shall be able to be configured for a minimum of two (2) reading times per day.
- E. The IRMS shall be able to be configured to take readings hourly, daily, weekly or monthly.
- F. All user programmable variables shall be able to be changed at any specified computer within the ALCMS system.
- G. All the IRMS data shall be viewable either as real-time or as historical data at any specified computer location. The IRMS information shall be available at all times and shall not require any special transfer of data between the IRMS system and the control system (since the IRMS is an integral component of the ALCMS).

Failsafe

- A. Each DCME unit shall provide a self-contained failsafe feature that shall perform the following functions:
 - 1. Insure default operation of the airport lighting, even if the entire airport lighting control system is not functioning.
 - 2. Display the commands sent by the computer to the CCRs and/or to the other controllable items.
 - 3. Adaptable to each CCR regardless of internal or external control voltage.
 - 4. Permits maintenance of portions of the control system, without changing the operational status of the lighting system.
- B. The failsafe mode of each DCME unit shall be "Passive Failsafe" mode.
- C. If the CCR was switched ON before the failure, it shall remain ON at the same brightness level.
- D. If the CCR was switched OFF before the failure, it shall remain OFF.

- E. Failsafe shall be able to be bypassed by selecting the CCR locally to any desired brightness level.

Failsafe Technical Specifications

- A. The failsafe system shall operate independently of the computer, providing failsafe interfacing to the CCR and/or other controllable elements.
- B. The failsafe system shall be based on electromechanical latching relays with the following characteristics:

Specification	Rating
Maximum switching voltage	240VAC, 125VDC
Nominal switching capacity	8A / 250VAC 5A / 30VDC
Rated current (resistive)	1A
Operational Life	Mechanical 5X10 ⁷ Electrical 10 ⁵
Protection	IP67 (protection against ingress of dust and water in harmful quantities)

- C. Mode of Operation
 - 1. The commands executed by the DCME to switch the CCR and/or controllable element shall be momentary commands.
 - 2. The control commands shall be mechanically latched upon execution.
 - 3. Failure of the DCME and/or loss of communication to the network shall not change the status of the airport lighting.

Graphical User Interface Operation

General

- A. The Tower Touchscreen display shall control and monitor the airfield lighting system. The display shall show real-time information on the operational status of the airfield lighting systems.
- B. The Touchscreen control stations shall consist of multiple Touchscreen ‘pages’ each with a specific function. These Touchscreen ‘pages’ are defined as follows:
 - 1. **Preset:** Consists of pre-defined preset buttons used to simplify airfield lighting control commands.
 - 2. **Runway Lights:** Consists of runway control touch buttons used to individually control runway circuits. Multiple runway pages may be necessary for airports with several runways.
 - 3. **Taxiway Lights:** Consists of taxiway control touch buttons used to individually control taxiway circuits if required.

4. **Utilities:** Consists of miscellaneous functions for calibrating the Touchscreen, granting lighting control to other locations, setting the date and time, etc.
- C. All preset and control configurations shall be defined by the airport/owner in conjunction with Air Traffic Control requirements.
- D. The ALCMS manufacturer shall provide preset tables to be used by the airport/owner to define the configuration settings.

Overview of Operation

- A. Airfield lighting control commands are entered into the system by touching the corresponding touch button on the Touchscreen video display. When a command is entered, the Touchscreen shall respond by graphically displaying the button as being depressed and change the button color.
- B. The associated circuit graphics shall alternately flash indicating the airfield lighting section that shall be affected when this command is "confirmed".
- C. Once confirmed, the Tower Touchscreen shall register the command, generate a data instruction and transmit the command to the vault computer for implementation. The command is also simultaneously transmitted to the maintenance computer and all other computers connected to the network.
- D. The tower Touchscreen shall receive confirmation from the vault that the corresponding equipment has responded to the control command and displays the current system status on the Touchscreen display.
- E. In the event that communications is lost between the tower and vault, an alarm is indicated at each computer location.
- F. In the event of a predefined alarm condition, the effected airfield lighting circuit graphic shall flash red and an audible alarm tone shall alert operators to the alarm condition.

ALCMS Alarm Functions

Touchscreen Audible Alarm

- A. The audible alarm shall sound at each Touchscreen display when an alarm condition occurs. In addition, the 'ALARM ACK' button shall flash and the associated airfield circuit graphics shall change to red.
- B. The audible alarm shall stop automatically after three (3) seconds unless the 'ALARM ACK' button is pressed.
- C. If the alarm is not acknowledged, the audible shall cease for sixty (60) seconds while the 'ALARM ACK' continues to flash. If the 'ALARM ACK' is still not pressed after the sixty (60) seconds, the audible shall sound again for three (3) seconds.
- D. This sequence shall repeat indefinitely until the alarm is acknowledged.

Circuit Alarms

- A. The ALCMS shall continuously monitor the status of all of the circuits per the monitoring requirements as specified previously.
- B. If there are any monitoring discrepancies (i.e. incorrect CCR output current, loss of primary power) an alarm shall be generated at the Touchscreen display for the associated circuit.

Touchscreen Command Sequences

- A. The Touchscreen control station shall allow the airfield lighting circuits to be controlled individually (i.e. RWY Edge) or as a group based on preset tables (See following section).
- B. Each control command shall require two distinct operator actions in order for the command to initiate any state changes in the airfield lighting. The command sequence shall be as follows:
 1. **Select circuit:** Operator selects the desired circuit to be changed.
 2. **Select intensity:** Operator selects the desired brightness step that the circuit is to be changed to.
 3. **Graphics flash:** The graphics associated with the selected circuit shall begin to flash visually indicating to the operator the airfield lighting section that is going to be affected by the command.
 4. **Confirm/Reject:** Operator selects the 'CONFIRM' button to accept the selection and initiate the lighting change. Operator selects the 'REJECT' button to cancel the selections and make another selection.

Touchscreen Preset Sequences

- A. The Touchscreen control station shall allow simultaneous airfield lighting circuit changes to be accomplished using preset lighting sequences.
- B. The preset lighting sequences shall be defined by the airport in airfield lighting preset tables.
- C. Each preset lighting change shall be based on the following operator inputs:
 1. **Active Runway Selection:** Operator selects the runway(s) that shall be active. This is based on runway direction (i.e. "RWY 10")
 2. **Day/Night Setting:** Operator selects the day/night setting. The day/night setting shall control the intensity of the circuits.
 3. **Visibility:** Operator selects a single visibility setting that is based upon the current airport visibility.
 4. **Confirm/Reject:** Operator selects the 'CONFIRM' button to accept the preset selections and initiate the lighting change. Operator selects the 'REJECT' button to cancel the selections and make another preset selection.
- D. Upon confirmation of the preset selections, the intensity of all the circuits associated with the preset condition shall automatically change to match the visibility requirement.
- E. The preset visibility setting of the CCRs is based on FAA document 7110.65J. Presets shall also be coordinated with the airport and the FAA to properly define airfield lighting operational usage.
- F. The visibility settings shall include Intensity and Preset Invalid monitoring. This indicates when a preset or intensity setting on the airfield is different than the selected preset intensity.
- G. According to FAA document 7110.65J, the visibility settings for the 5-step CCRs shall be based on the following table:

Visibility	Day (Brightness step)	Night (Brightness step)
Less than 1 mile	5	4
1 to but not including 2 miles	4	3
2 to but not including 3 miles	3	3
3 to 5 miles inclusive	0	2
More than 5 miles	0	1

Table 2: 5-step Regulators

- H. According to FAA document 7110.65J, the visibility settings for the 3-step CCRs shall be based on the following table:

Visibility	Day (Brightness step)	Night (Brightness step)
Less than 1 mile	3	2
1 to but not including 2 miles	0	1
2 to but not including 3 miles	0	1
3 to 5 miles inclusive	0	1
More than 5 miles	0	1

Table 3: 3-step Regulators

- I. According to FAA document 7110.65J, the visibility settings for the 1-step CCRs shall be based on the following table:

Visibility	Day (Brightness step)	Night (Brightness step)
Less than 1 mile	1	1
1 to but not including 2 miles	0	1
2 to but not including 3 miles	0	1
3 to 5 miles inclusive	0	1
More than 5 miles	0	1

Table 4: 1-step Regulators

- J. According to FAA document 7110.65J, the visibility settings for the Rotating Beacon shall be based on the following table:

Visibility	Day (Brightness step)	Night (Brightness step)
Less than 1 mile	ON	ON
1 to but not including 2 miles	ON	ON
2 to but not including 3 miles	ON	ON
3 to 5 miles inclusive	OFF	ON
More than 5 miles	OFF	ON

Table 5: Beacon

Graphical Airport Pictorial

The ALCMS display screens shall display a graphical pictorial representation of the airport runways, taxiways and other requested airport features.

- A. When there is a change in lighting system status, the appropriate graphical detail shall indicate the status by changing color.
- B. The circuit intensity display colors shall be represented as seen in the legend as follows.

COLOR LEGEND

STEP 5		STEP 3
STEP 4		
STEP 3		STEP 2
STEP 2		
STEP 1		STEP 1
STEP 0		STEP 0

Figure 1: Brightness Step Color Legend

- C. The status monitoring display colors shall be represented as seen in the legend as follows. This includes ATS monitoring, generator monitoring and communications monitoring:

COLOR LEGEND




NORMAL	
ALARM	
OFF	

Figure 2: Status Monitoring Color Legend

Vault Emergency Generator Control

- A. The ALCMS shall provide control of the existing emergency generator.
- B. The ALCMS shall provide one (1) optically isolated, dry-contact output point at the Vault.
- C. The ALCMS shall close the output to command the generator ON and open the output to turn the generator OFF.
- D. The Tower shall only have generator monitoring capability at the time. However, the control of the generator can be added in the future.
- E. Locating and wiring of the output points within the Generator equipment shall be completed by the Contractor in coordination with the airport/engineer and equipment manufacturer.

Vault Automatic Transfer Switch (ATS) and Generator Monitoring

- A. The ALCMS system shall provide the optically isolated digital inputs to monitor the following feedback points for the existing ATS:
 - 1. Utility Available
 - 2. Utility On-line
 - 3. Generator Available
 - 4. Generator On-line
 - 5. Generator Alarm
- B. Locating and wiring of the monitoring points within the ATS and generator equipment shall be completed by the contractor in coordination with the airport/engineer and equipment manufacturer.

Beacon Control

- A. The ALCMS shall provide control of the rotating beacon from the ALCMS node.
- B. The ALCMS shall provide one (1) optically isolated, dry-contact output point at the Beacon Control panel inside vault. The contact shall be rated 1A at 120Vac.
- C. The ALCMS shall close the output to command the beacon ON and open the output to turn the beacon OFF. The contractor shall provide an interface relay/contactors to connect power to the beacon.
- D. Locating and wiring of the output points within the Beacon equipment shall be completed by the Contractor in coordination with the airport/engineer and equipment manufacturer

Radio Control Enabled Control Methodology

- A. The ALCMS shall provide an interface to the existing L-854 radio controller located inside the vault.
- B. One (1) button labeled "Radio Control" will be programmed to allow air-to-ground radio control after normal operating hours.

- C. When the radio control button is pressed, all preset settings are changed for radio operations according to the preset control methodology.
- D. Radio Control preset lighting settings shall be specified by the airport.

Radio Control Interface

- A. The ALCMS system shall provide three (3) inputs for Radio Control commands. Radio Control inputs shall be connected to a DCME at the vault.
- B. The inputs shall be optically isolated and require the monitoring source and common from the monitored device.
- C. The ALCMS DCME inputs shall be rated at 24-48VDC and 120-240VAC at 1 amp.
- D. The ALCMS shall monitor the inputs and adjust the airfield lighting according to the Radio Control preset table.
- E. The ALCMS shall only monitor for the radio control inputs when the "Radio Control" button is enabled at the Tower.
- F. Locating and wiring of Radio Control output points shall be completed by the contractor in coordination with the airport/engineer and equipment manufacturer.

800-2.7 Shop Drawings

In addition to the requirements of Section 60 Paragraph 60-09 of the General Provisions of Division I of these specifications, shop drawings shall also be submitted for review for all items specified herein.

CONSTRUCTION METHODS - INSTALLATION OF EQUIPMENT IN VAULT, ATCT OR AIRPORT OFFICE

800-3.1 GENERAL

The Contractor shall furnish, install, and connect all equipment, equipment accessories, conduit, cables, wires, buses, grounds, and support necessary to ensure a complete and operable airfield lighting control and monitoring system as specified herein and shown in the plans.

The equipment installation and mounting shall comply with the requirements of the National Electrical Code and local code agency having jurisdiction.

800-3.2 DUCT AND CONDUIT

The Contractor shall install underground galvanized rigid steel conduit as detailed on the plans and in accordance with Item 110 of the Standard Specifications for Construction of Airports.

800-3.3 WIRING AND CONNECTIONS

The Contractor shall make all necessary electrical connections in the vault and airport office per the wiring diagrams furnished and as directed by the ALCMS manufacturer and Engineer. In wiring to the terminal blocks, the Contractor shall leave sufficient extra length on each control lead to make future changes in connections at the terminal block. This shall be accomplished by running each control lead the longest way around the box to the proper terminal. Leads shall be neatly laced in place.

800-3.4 MARKING AND LABELING

All equipment, control wires, terminal blocks, etc., shall be tagged, marked, or labeled as specified below:

- A. **Wire identification.** The Contractor shall furnish and install self-sticking wire labels or identifying tags on all control wires at the point where they connect to the control equipment or to the terminal blocks. Wire labels, if used, shall be of the self-sticking preprinted type and of the manufacturer's recommended size for the wire involved. Identification -markings designated in the plans shall be followed. Tags, if used, shall be of fiber not less than 3/4 inch (19 mm) in diameter and not less than 1/32 inch (1 mm) thick. Identification markings designated in the plans shall be stamped on tags by means of small tool dies. Each tag shall be securely tied to the proper wire by a nonmetallic cord.
- B. The Contractor shall stencil identifying labels on the cases of regulators, breakers, and distribution and control relay cases with white oil paint as designated by the Engineer. The letters and numerals shall be not less than one inch (25 mm) in height and shall be of proportionate width. The Contractor shall also mark the correct circuit designations per the wiring diagram on the terminal marking strips, which are a part of each terminal block.

800-3.5 ALCMS INSTALLATION

The Contractor shall install new ALCMS at existing airfield lighting vault, and FAA ATCT as shown on the plans and specified herein.

800-3.6 ATCT ALCMS MODIFICATIONS

The Contractor shall remove existing ALCMS, ALCMS components and cabling to make space to install new ALCMS in the Tower. New fiber optic cable shall be installed through existing conduits, junction boxes and cable chase up to the ATCT 3rd floor.

The contractor shall install data/communication cable from ALCMS enclosure located on the ATCT 3rd floor to the touchscreen located in the Tower cab. If required, due to the length of the data cable, Contractor shall furnish and install signal extender device as recommended by the ALCMS manufacturer. Existing 120VAC power to the ALCMS enclosure shall be reconnected to the new ALCMS in ATCT. Furnish and install new UPS for Tower cab ALCMS touchscreen and modify tower cabinets as required.

All work inside the ATCT shall be coordinated and scheduled with FAA. The Contractor shall not be allowed to perform any work inside ATCT without permission of FAA. The Contractor shall give minimum of (2) weeks advanced notice to FAA prior to scheduling any work in the ATCT.

800-3.7 VAULT ALCMS MODIFICATIONS

The Contractor shall remove existing ALCMS, ALCMS components and cabling to make space to install new ALCMS in the Vault. New fiber optic cable shall be installed through existing conduits and junction boxes to the ALCMS enclosure in the vault.

The contractor shall install control and data/communication cable from ALCMS enclosure to each of the DCME unit in new conduits as shown on the plans. New DCME units shall be installed on floor mounted Unistrut frame as detailed on the plans. Install new 120VAC power supply for the new ALCMS enclosure. Install new conduits and conductors to connect existing ATS, generator, L-854 Radio Controller, Beacon and Windcones to the new ALCMS.

All work inside the vault shall be coordinated and scheduled with the Airport. The Contractor shall not be allowed to perform any work inside the vault without permission of the Airport. The Contractor shall give minimum of (2) weeks advanced notice to the Airport prior to scheduling any work in the vault.

METHOD OF MEASUREMENT

800-4.1

The quantity of new ALCMS to be paid for under this item shall be lump sum. This item shall include all the work associated with new ALCMS, including but not limited to installation of ALCMS equipment in vault and existing tower. This item shall also include removal of existing ALCMS, testing, commissioning and training for a complete and operational ALCMS as specified.

800-4.2

The quantity of ATCT ALCMS Modification to be paid for under this item shall be lump sum. This item shall include all the work associated with the installation of new fiber optic cable and data/communication cable inside the ATCT. This item shall also include coordination with FAA, installation of tower cab equipment, 120VAC power, UPS in the tower cab and other ALCMS items not included in ALCMS pay item. The quantity of fiber optic cable between vault and ATCT shall not be included in this item, it shall be measure and paid under Fiber Optic Cable.

800-4.3

The quantity of Vault ALCMS Modification to be paid for under this item shall be lump sum. This item shall include all the work associated with the installation of DCME units, new fiber optic cable and data/communication cable and conduit inside the vault. This item shall also include coordination with the Airport, installation of unistrut framing, 120VAC power, cable and conduit from the Vault to the generator, generator/ATS interface, Beacon interface, Windcone interface and other ALCMS items not included in ALCMS pay item. The quantity of fiber optic cable between vault and ATCT shall not be included in this item, it shall be measure and paid under Fiber Optic Cable.

BASIS OF PAYMENT

800-5.1

Payment will be made at the contract unit price per lump sum completed and accepted item. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

ITEM AR800032	ATCT ALCMS MODIFICATIONS – PER LUMP SUM
ITEM AR800049	VAULT ALCMS MODIFICATIONS – PER LUMP SUM
ITEM AR800192	INSTALL ALCMS L-890 – PER LUMP SUM

800-5.2 MATERIAL REQUIREMENTS

AC 150/5340-30	Design and Installation Details for Airport Visual Aids
AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-10	Specification for Constant Current Regulators and Regulator Monitors
AC 150/5345-13	Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits
AC 150/5345-49	Specification L-854, Radio Control Equipment;
AC 150/5345-53	Airport Lighting Equipment Certification Program
AC 150/5345-56B	Specification for L-890 Airport Lighting Control and Monitoring System (ALCMS) American National Standards Institute / Insulated Cable Engineers Association (ANSI/ICEA) S-85-625 Standard for Telecommunications Cable Aircore, Polyolefin Insulated, Copper Conductor Technical Requirements
FED SPEC W-C-1094	Conduit and Conduit Fittings Plastic, Rigid
SSPC Paint 25 BCS	Zinc Oxide, Alkyd, Linseed Oil, Primer for Underwriters Laboratories Standard 6 Electrical Rigid Metal Conduit – Steel
NFPA-70	National Electrical Code (NEC)
NFPA-70E	Standard for Electrical Safety in the Workplace
NFPA-780	Standard for the Installation of Lightning Protection Systems