# 04A

Letting September 20, 2024

# Notice to Bidders, Specifications and Proposal

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



Springfield, Illinois 62764

Contract No. PA066 Chicago Executive Airport Wheeling, Illinois Cook County Illinois Project No. PWK-5128 SBG Project No. 3-17-SBGP-TBD



- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on September 20, 2024, 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. PA066 Chicago Executive Airport Wheeling, Illinois Cook County Illinois Project No. PWK-5128 SBG Project No. 3-17-SBGP-TBD

Construct Apron (NE Quadrant) and Taxiway Access

For engineering information, please contact Sheue Torng Lee, P.E. of Crawford, Murphy & Tilly, Inc. at 630.907.7079.

#### 3. INSTRUCTIONS TO BIDDERS.

- (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-23 of the Standard Specifications for Construction of Airports (Adopted March 22, 2023), become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
- (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded within 90 calendar days to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

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

- 6. **DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is <u>10.0</u>%.
- 7. SPECIFICATIONS AND DRAWINGS. The work shall be done in accordance with the Standard Specifications for Construction of Airports (Adopted March 22, 2023), the Special Provisions dated <u>July 26, 2024</u>, and the Construction Plans dated <u>July 26, 2024</u> as approved by the Illinois Department of Transportation, Division of Aeronautics.

- 8. **BIDDING REQUIREMENTS AND BASIS OF AWARD.** When alternates are included in the proposal, the following shall apply:
  - a. Additive Alternates
    - (1) Bidders must submit a bid for the Base Bid and for all Additive Alternates.
    - (2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

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

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

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

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

- b. Optional Alternates
  - (1) Bidders must submit a bid for the Base Bid and for either Alternate A or Alternate B or for both Alternate A and Alternate B.
  - (2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

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

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

The contract time for this contract is <u>Base Bid: 74 calendar days; Additive Alternate #1: 14 additional calendar days;</u> <u>Additive Alternate #2: 4 additional calendar days</u>.

- **10. INDEPENDENT WEIGHT CHECKS.** The Department reserves the right to conduct random unannounced independent weight checks on any delivery for bituminous, aggregate or other pay item for which the method of measurement for payment is based on weight. The weight checks will be accomplished by selecting, at random, a loaded truck and obtaining a loaded and empty weight on an independent scale. In addition, the department may perform random weight checks by obtaining loaded and empty truck weights on portable scales operated by department personnel.
- 11. MATERIAL COST ADJUSTMENTS. Federal Aviation Administration rules prohibit the use of escalation clauses for materials. Therefore, the Illinois Department of Transportation, Division of Aeronautics cannot offer any material cost adjustment provisions for projects that utilize Federal Funds.
- 12. GOOD FAITH COMPLIANCE. The Illinois Department of Transportation has made a good faith effort to include all statements, requirements, and other language required by federal and state law and by various offices within federal and state governments whether that language is required by law or not. If anything of this nature has been left out or if additional language etc. is later required, the bidder/contractor shall cooperate fully with the Department to modify the contract or bid documents to correct the deficiency. If the change results in increased operational costs, the Department shall reimburse the contractor for such costs as it may find to be reasonable.

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

#### ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS

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

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

#### DISADVANTAGED BUSINESS POLICY

<u>NOTICE</u>: 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."

<u>POLICY</u>: 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.

<u>OBLIGATION</u>: 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.

<u>DBE/WBE CONTRACTOR FINANCE PROGRAM</u>: 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).

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

#### SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE) Effective: September 1, 2000 Revised: March 2, 2019

<u>FEDERAL OBLIGATION</u>. 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.

<u>STATE OBLIGATION</u>. 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.

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

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

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

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

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 10.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

(a) The bidder documents enough DBE participation has been obtained to meet the goal or,

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

<u>DBE LOCATOR REFERENCES</u>. 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

<u>CONTRACT COMPLIANCE</u>. 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) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at <u>DOT.DBE.UP@illinois.gov</u>.

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

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

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

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

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

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

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

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

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

(1) The listed DBE subcontractor fails or refuses to execute a written contract;

(2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;

(3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;

(4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;

(5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

(6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;

(7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;

(8) The listed DBE is ineligible to receive DBE credit for the type of work required;

(9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;

(10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

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

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

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

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

#### SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE) Effective: June 2, 2012 Revised: November 1, 2021

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

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

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

#### SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE) Effective: November 2, 2017 Revised: April 1, 2019

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

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

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

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

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

# SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS Effective: November 2, 2017

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

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

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

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

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

#### SPECIAL PROVISION FOR SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE) Effective: April 2, 2018

#### Subcontractor and Disadvantaged Business Enterprise Payment Reporting

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

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

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

#### SPECIAL PROVISION FOR ADDITIONAL STATE REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION CONTRACTS Effective: February 1, 1969 Revised: January 1, 2017

#### EQUAL EMPLOYMENT OPPORTUNITY

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

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

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

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

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

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

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

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

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

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

#### SPECIAL PROVISION FOR SUBMISSION OF PAYROLL RECORDS (BDE) Effective: April 1, 2021 Revised: November 2, 2023

#### STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

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

#### SPECIAL PROVISION FOR NPDES CERTIFICATION

In accordance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 III. 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 <u>each</u> 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 Base Bid: 74 calendar days; Additive Alternate #1: 14 additional calendar days; Additive Alternate #2: 4 additional calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

#### ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE) Effective: June 2, 2021 Revised: April 2, 2024

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. Of this goal, at least 50% of the labor hours of each prevailing wage classification performed by apprentices shall be performed by graduates of the Illinois Works Pre-Apprenticeship Program, the Illinois Climate Works Pre-Apprenticeship Program, or the Highway Construction Careers Training Program.

The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

#### State of Illinois Department of Transportation

#### SPECIAL PROVISION FOR SECTION 80 PROSECUTION AND PROGRESS

This Special Provision amends the provisions of the Standard Specifications for Construction of Airports (Adopted March 22, 2023) and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

#### 80-09 Failure to complete on time.

ADD:

Schedule of Deductions for Each Day of Overrun in Contract Time				
Original Cont	ntract Amount Daily Charges		arges	
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 March 22, 2023) 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'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 or subcontractor of such offset.

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

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

90-09 Trust agreement option.

DELETE: The entire section.

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

#### A1 ACCESS TO RECORDS AND REPORTS

#### A1.1 CONTRACT CLAUSE

#### ACCESS TO RECORDS AND REPORTS

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

#### A2 AFFIRMATIVE ACTION REQUIREMENTS

#### A2.1 SOLICITATION CLAUSE

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

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

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

#### Timetables

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

#### AREA COVERED (STATEWIDE)

Goals for Women apply nationwide.

#### GOAL

Goal (percent)

Goal

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.

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

3740 Kankakee, IL - IL - Kankakee	9.1
Non-SMSA Counties IL - Bureau, DeKalb, Grundy, Iroquois, Kendall, LaSalle, Livingston, Putnam IN - Jasper, Laporte, Newton, Pulaski, Starke	18.4
084 Champaign - Urbana, IL: SMSA Counties: 1400 Champaign - Urbana - Rantoul, IL - IL - Champaign	7.8
Non-SMSA Counties - IL - Coles, Cumberland, Douglas, Edgar, Ford, Piatt, Vermilion	4.8
085 Springfield - Decatur, IL: SMSA Counties: 2040 Decatur, IL - IL - Macon	7.6
7880 Springfield, IL - IL - Menard, Sangamon	4.5
Non-SMSA Counties IL - Cass, Christian, Dewitt, Logan, Morgan, Moultrie, Scott, Shelby	4.0
086 Quincy, IL: Non-SMSA Counties	3.1
IL - Adams, Brown, Pike MO - Lewis, Marion, Pike, Ralls	
087 Peoria, IL: SMSA Counties: 1040 Bloomington - Normal, IL - IL - McLean	2.5
6120 Peoria, IL - IL - Peoria, Tazewell, Woodford	4.4
Non-SMSA Counties - IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren	3.3
088 Rockford, IL: SMSA Counties: 6880 Rockford, IL - IL - Boone, Winnebago	6.3
Non-SMSA Counties - IL - Lee, Ogle, Stephenson	4.6
098 Dubuque, IA: Non-SMSA Counties - IL - JoDaviess IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik WI - Crawford, Grant, Lafayette	0.5
099 Davenport, Rock Island, Moline, IA - IL: SMSA Counties: 1960 Davenport, Rock Island, Moline, IA - IL - IL - Henry, Rock Island IA - Scott	4.6
Non-SMSA Counties - IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine MO - Clark	3.4
107 St. Louis, MO: SMSA Counties: 7040 St. Louis, MO - IL - IL - Clinton, Madison, Monroe, St. Clair MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City	14.7
Non-SMSA Counties - IL - Alexander, Bond, Calhoun, Clay, Effingham, Fayette, Franklin, Greene, 15	11.4

Jackson, Jasper, Jefferson, Jersey, Johnson, Macoupin, Marion, Montgomery, Perry, Pulaski, Randolph, Richland, Union, Washington, Wayne, Williamson

MO - Bollinger, Butler, Cape Girardeau, Carter, Crawford, Dent, Gasconade, Iron, Lincoln, Madison, Maries, Mississippi, Montgomery, Perry, Phelps, Reynolds, Ripley, St. Francois, St. Genevieve, Scott, Stoddard, Warren, Washington, Wayne

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

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

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

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

#### A3 BREACH OF CONTRACT TERMS

#### A3.1 CONTRACT CLAUSE

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

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

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

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

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

#### A4 BUY AMERICAN PREFERENCE

#### A4.1 SOLICITATION CLAUSES

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

#### FAA BUY AMERICAN PREFERENCE

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

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

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

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

The bidder shall submit the completed and signed "Certification of Compliance with FAA Buy American Preference – Construction Projects" form with the bid. The required form must be uploaded in the "Miscellaneous Documents" area as a single .pdf file in the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

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

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

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

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

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

□ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA and other related U.S. statutes, guidance, and policies of the FAA by:

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

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

- a) To provide to the Illinois Department of Transportation, Division of Aeronautics and the FAA evidence that documents the source and origin of the iron, steel, and/or manufactured product.
- b) To faithfully comply with providing U.S. domestic products.
- c) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- d) Certify that all construction materials used in the project are manufactured in the U.S.

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

- a) To submit to the Illinois Department of Transportation, Division of Aeronautics and the FAA within 15 calendar days of being selected as the responsive bidder, a formal waiver request and required documentation that supports the type of waiver being requested.
- b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
- c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

#### **Required Documentation**

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

a) Completed Content Percentage Worksheet and Final Assembly Questionnaire

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

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

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

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

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

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

Signature

Company Name

Title

#### A5 CIVIL RIGHTS - GENERAL

#### A5.1 CONTRACT CLAUSES

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

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

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

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

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

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

#### A6 CIVIL RIGHTS – TITLE VI ASSURANCE

#### A6.1 CONTRACT CLAUSE

#### A6.1.1 Title VI Solicitation Notice

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

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

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

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

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

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

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

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

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

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

#### A7 CLEAN AIR AND WATER POLLUTION CONTROL

#### A7.1 CONTRACT CLAUSE

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

#### CLEAN AIR AND WATER POLLUTION CONTROL

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

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

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

#### A8.1 CONTRACT CLAUSE

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

#### CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

#### 1. Overtime Requirements.

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

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

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

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

#### 4. Subcontractors.

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

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

#### A9.1 CONTRACT CLAUSE

#### COPELAND "ANTI-KICKBACK" ACT

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

#### A10 DAVIS-BACON REQUIREMENTS

#### A10.1 CONTRACT CLAUSE

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

#### 1. Minimum Wages.

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

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

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

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

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

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

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

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

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

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

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

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

#### 3. Payrolls and Basic Records.

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

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

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

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

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

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

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

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

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

#### 4. Apprentices and Trainees.

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

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

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

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

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

6. Subcontracts.

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

#### 7. Contract Termination: Debarment.

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

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

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

9. Disputes Concerning Labor Standards.

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

10. Certification of Eligibility.

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

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

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

#### A11 DEBARMENT AND SUSPENSION

#### A11.1 CERTIFICATION CLAUSES

#### A11.1.1 Bidder or Offeror Certification

#### CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

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

#### A11.1.2 Lower Tier Contract Certification

#### CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

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

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

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

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

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

#### A12 DISADVANTAGED BUSINESS ENTERPRISE

#### A12.1 REQUIRED PROVISIONS

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

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

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

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

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

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

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

#### DISADVANTAGED BUSINESS ENTERPRISES

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

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

#### A13 DISTRACTED DRIVING

#### A13.1 CONTRACT CLAUSE

#### **TEXTING WHEN DRIVING**

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

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

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

#### A14.1 CONTRACT CLAUSE

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

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

#### A15 EQUAL EMPLOYMENT OPPORTUNITY (EEO)

#### A15.1 MANDATORY CONTRACT CLAUSE

#### A15.1.1 EEO Contract Clause

#### EQUAL OPPORTUNITY CLAUSE

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

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender 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 consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

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

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

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

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

#### A15.1.2 EEO Specification

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

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
  - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

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

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

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

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

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

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

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

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

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

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

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

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

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

#### A16.1 SOLICITATION CLAUSE

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

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

#### A17 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

#### A17.1 CERTIFICATION CLAUSE

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

#### CERTIFICATION REGARDING LOBBYING

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

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

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

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

#### A18 PROHIBITION of SEGREGATED FACILITIES

#### A18.1 CONTRACT CLAUSE

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

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

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

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

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

#### A19.1 CONTRACT CLAUSE

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

#### A20 PROCUREMENT OF RECOVERED MATERIALS

#### A20.1 CONTRACT CLAUSE

#### PROCUREMENT OF RECOVERED MATERIALS

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

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

The list of EPA-designated items is available at <a href="http://www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products">www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products</a>.

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

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

#### A21 RIGHT TO INVENTIONS

#### A21.1 CONTRACT CLAUSE

#### **RIGHTS TO INVENTIONS**

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

#### A22 SEISMIC SAFETY

#### A22.1 CONTRACT CLAUSE

#### A22.1.1 Construction Contracts

#### SEISMIC SAFETY

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

#### A23 TAX DELINQUENCY AND FELONY CONVICTIONS

#### A23.1 CERTIFICATION CLAUSE

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

#### Certifications

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

#### Note

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

#### **Term Definitions**

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

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

#### A24 TERMINATION OF CONTRACT

#### A24.1 CONTRACT CLAUSE

#### A24.1.1 Termination for Convenience

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

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

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

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

Owner agrees to pay Contractor for:

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

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

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

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

#### A24.1.2 Termination for Default

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

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

#### A25 TRADE RESTRICTION CERTIFICATION

#### A25.1 SOLICITATION CLAUSE

#### TRADE RESTRICTION CERTIFICATION

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

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

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

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

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

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

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

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

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

#### A26 VETERAN'S PREFERENCE

#### A26.1 CONTRACT CLAUSE

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

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

#### A27 DOMESTIC PREFERENCES FOR PROCUREMENTS

#### A27.1 CERTIFICATION CLAUSE

#### CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS

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

#### **SECTION III**

**Special Provisions** 

For

#### CONSTRUCT APRON (NE QUADRANT) AND TAXILANE ACCESS

#### ILLINOIS PROJECT: PWK-5128 S.B.G. PROJECT: 3-17-SBGP-TBD

at

#### CHICAGO EXECUTIVE AIRPORT WHEELING/PROSPECT HEIGHTS, ILLINOIS

IDOT LETTING: SEPTEMBER 20, 2024

**Final Submittal** 

July 26, 2024

Prepared By:

CRAWFORD, MURPHY & TILLY, INC. CONSULTING ENGINEERS 550 N. COMMONS DRIVE, SUITE 116 AURORA, ILLINOIS 60504 http://www.cmtengr.com



23005747-00



Date Signed: 7/26/2024 Expiration Date: 11/30/2025

#### **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 Chicago Executive Airport, Wheeling/Prospect Heights, Illinois.

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

The "Illinois Standard Specifications for Construction of Airports", adopted March 22, 2023, 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 January 1, 2022, shall also apply.

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HMA COMPARISON SAMPLES, DATED DECEMBER 7, 2020

# PART 1 – GENERAL CONTRACT PROVISIONS

# SECTION 40 – SCOPE OF WORK

#### 40-05 MAINTENANCE OF TRAFFIC

#### ADD:

h. To maintain airport operations and to facilitate the construction of the proposed work, the project has been divided into separate phases in accordance with Advisory Circular 150/5370-2G *Operational Safety on Airports During Construction*. References to Construction Safety and Phasing Plans (CSPP) in that document shall be interpreted to mean the phase limits, barricade locations, access points and notes shown on the construction activity plan sheets included in the as-bid contract documents. When "safety" is used or referred to in the contract documents and in the advisory circular(s) it shall be redefined by this contract as meaning "operational safety". The Construction Operational Safety and Phasing Plan (CSPP) establishes the airport and project specific requirements, supplementing the requirements in the AC, that are to be included in the contractor's bid for maintaining operational safety during construction.

i. The Construction Safety and Phasing Plan (CSPP) contained herein has been approved by both the Airport and the FAA. The Contractor shall be required to divide the overall work into separate phases in substantial conformance with the CSPP shown in the plans, except as allowed by the contract documents and approved by the Division on behalf of the FAA. Durations specified for individual phases shall become requirements of the contract and shall be subject to liquidated damages.

j. The contractor activity on the airfield shall be limited to the limits of construction as identified on the construction activity plan drawings. Beyond the limits of construction, the Contractor shall not have access to any part of the active airfield pavement with any equipment or personnel without the approval of Airport Management.

k. Maintenance of Airport Systems are critical to the operation of the Airport and the safety and/or security of the traveling public. Prior to beginning work the Contractor shall investigate existing systems which may be located within the work area and locate all existing utilities. The Contractor may seek assistance from the JULIE, Engineer, Resident Engineer, Airport and FAA with locating utilities but the final responsibility for all utility locates lies solely with the Contractor. If the Contractor's investigation reveals that a utility must be relocated to allow for the performance of the work in the plans, the contractor shall immediately notify the Resident Engineer and remain clear of the utility until resolution has been determined by the Division and the Airport. Any system, including but not limited to systems associated with security, air navigation, weather, airfield lighting damaged by the Contractor's operations shall be immediately repaired to the satisfaction of the owner. No delay shall be taken in the repair of the damaged facility. The Contractor shall not be allowed to finish work for the day until the utility has been repaired.

I. The Contractor shall provide his own radio capable of transmitting and receiving on the Unicom frequencies noted in the plans.

m. The Contractor shall provide and maintain construction entrance signage on all public use roads intended to be used by his operations as required by the Illinois Department of Transportation, or the jurisdictional agency of the road. The Contractor shall be responsible for coordinating all hauling and access on State, City, Township or County roads with the agency responsible for the roadway.

n. If it is found the fully loaded delivery trucks are excessively damaging the Airport or local roadway pavement, the Contractor shall limit the weight of the material being hauled onto the site. The Resident

1

Engineer shall determine what is considered excessive damage. No payments will be made for additional hauling that may be required due to load restrictions.

o. The Contractor shall be required to provide a 24-hour phone number for emergency barricades and barricade lighting maintenance.

# 40-09 SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)

REVISE: The first sentence of the first paragraph to read:

10 days prior to the preconstruction conference, the Contractor shall submit a SPCD to the Airport describing how he will comply with the requirements of the AC plus the CSPP and supplying any details that could not be determined before contract award.

ADD: New section:

#### 40-10 BARRICADES, WARNING SIGNS AND HAZARD MARKINGS.

The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area shall be a maximum of 18 inches high. Unless otherwise specified, barricades shall be spaced not more than 10 feet apart.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office).

Any cost for signage or traffic control shall be borne by the Contractor.

Barricades, as approved by the FAA, shall be provided per the details in the plan sheets. The barricades shall be lighted with steady burn omni-directional red lights supplemented with a 20" x 20" orange flag.

Barricades shall be placed as shown in the plans or as directed by the Resident Engineer or Airport.

The Contractor shall be responsible for supplying, maintaining and any moving of all barricades. Lights shall be maintained in proper working order. No separate payment will be made for supplying, maintaining and moving barricades but shall be considered incidental to the contract.

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

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

The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to FAA Advisory Circular 150/5370-2 (latest revision).

Mark and identify vehicles in accordance with AC 150/5210-5 (latest revision) *Painting, Marking, and Lighting of Vehicles Used on an Airport.* When any vehicle is required to travel over any portion of the aircraft movement area (within the existing perimeter fence) and runway approach area, the vehicle shall be properly identified to operate in the area or provided with a flag on a staff attached to the vehicle so that the flag will be readily visible. The flag should be not less than 3-feet square consisting of a checkered pattern of international orange and white squares of not less than one foot on each side and displayed in full view above the vehicle. A flag or escort vehicle is not required for vehicles which have been painted, marked and lighted for routine use on aircraft movement areas. Any vehicle operating on the movement area during the hours of darkness should be equipped with an amber flashing dometype light, in accordance with local and/or state codes.

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

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

# SECTION 50 – CONTROL OF WORK

#### 50-05 COOPERATION BETWEEN CONTRACTORS

REVISE: The 1<sup>st</sup> sentence of the 2<sup>nd</sup> paragraph to read:

The Contractor shall plan and conduct his/her work so as not to interfere or hinder the progress of work being performed by other contractors or Airport personnel.

#### 50-06 CONSTRUCTION LAYOUT AND STAKES

DELETE: The 1<sup>st</sup> paragraph.

ADD: As the 1<sup>st</sup> paragraph:

The Contractor will be required to furnish and place construction layout stakes for this project. The establishment of survey control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor.

DELETE: The 2<sup>nd</sup> paragraph.

ADD: As the 2<sup>nd</sup> paragraph:

The Resident Engineer will locate and reference three (3) control points and will establish benchmarks along the line of the improvement outside construction limits. The Contractor shall locate and reference the centerline of survey, which shall also consist of locating and referencing control points such as point of curvature, points of tangent, and sufficient points on tangent to provide a line of sight. Control points set by the Resident Engineer shall be identified in the field to the Contractor, and the field notes shall be kept in the office of the Resident Engineer.

ADD:

Benchmarks will be established along the project outside of construction lines.

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.

The Contractor shall immediately notify the Resident Engineer of conflicts or discrepancies with the established control points.

#### 50-10 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. Contractor shall obtain written permission from the Airport Owner to use any airfield pavements.

#### 50-11 MAINTENANCE DURING CONSTRUCTION

#### ADD:

The Contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize the ponding of water. In areas where the Contractor is required to core out or remove pavements the contractor shall cut temporary ditches or swales to maintain positive drainage. At locations where temporary ditches are not feasible, the Contractor shall excavate storm water storage areas adjacent to but at a lower elevation than the bottom of the work and utilize mechanical pumps to promptly remove storm water from the excavations. All existing pavement areas that are to remain open to aircraft traffic shall be kept clean to the satisfaction of Airport Manager and the Resident Engineer. At the request of the Resident Engineer or of the Airport, the Contractor shall provide a selfpropelled, vacuum or regenerative (recirculating) air pavement sweeper, a pavement blower or tractor mounted "sweeper box". At a minimum, a pavement blower shall be kept on site at all times.

Material tracked onto public streets shall be removed continuously during the work.

No material capable of being blown onto airfield pavement will be allowed to be stored uncovered anywhere within the fence line, at any time during construction.

## 50-14 FINAL ACCEPTANCE

DELETE: The 1<sup>st</sup> sentence of the 1<sup>st</sup> paragraph.

ADD: As the 1<sup>st</sup> sentence of the 1<sup>st</sup> paragraph.

Upon due notice to the Resident Engineer from the Contractor of presumptive completion of the entire project, the charging of Contract Time shall be suspended, and the Engineer will make an inspection.

ADD: After the 1<sup>st</sup> sentence of the 2<sup>nd</sup> paragraph:

The charging of Contract Time shall resume on the day following the inspection and shall continue until the remaining work, including the applicable requirements of Section 40-08, Final Clean-up, is completed to the Engineer's satisfaction.

#### 50-16 PLANS AND WORK DRAWINGS

REVISE: The 2<sup>nd</sup> sentence of the 11<sup>th</sup> paragraph to read as follows:

Such review will not relieve the Contractor of the responsibility for complying with the contract document requirements or for any error that may exist in the submittal. The Contractor is responsible for the dimensions and designs of adequate connections, detail and satisfactory construction of all work.

REVISE: The 15<sup>th</sup> paragraph to read:

Shop drawing submittals that do not include the information below will be rejected and returned to the Contractor. Information to be included on shop drawing submittals shall conform to the following.

PROJECT LOCATION:	Chicago Executive Airport
PROJECT TITLE:	Construct Apron (NE Quadrant) and Taxilane Access
PROJECT NUMBERS:	IL Project: PWK-5128
CONTRACT ITEM:	(i.e. AR156520 Inlet Protection)
SUBMITTED BY:	(Contractor/Subcontractor Name)
DATE:	(Date Submitted)

ADD: To the end of the 18<sup>th</sup> paragraph:

d. "Rejected": Submittal shall not be used at the project site.

# SECTION 60 – CONTROL OF MATERIALS

#### 60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

REVISE: The 3<sup>rd</sup> paragraph to read:

As a minimum, the Contractor shall provide, prior to delivery, statements (shipment tickets, source, certificate of analysis (COA), sample, etc.) as required by the current Illinois Department of Transportation, Bureau of Airport Engineering Manual for Documentation of Airport Materials or as requested by the Engineer of Airport Construction and Materials.

REVISE: The 11<sup>th</sup> paragraph to read:

The Contractor shall furnish airport lighting equipment that meets the requirements of the specifications; and is listed in the current Federal Aviation Administration Advisory Circular (AC) 150/5345-53, *Airport Lighting Equipment Certification Program and Addendum*, that is in effect on the date of advertisement; and meets "Buy America" requirements.

#### 60-03 CERTIFICATION OF COMPLIANCE/ANALYSIS (COC/COA)

ADD: After the 6<sup>th</sup> paragraph:

The Contractor shall certify all materials contained in the contract. Certification and documentation shall be submitted to the Resident Engineer and Project Engineer. It shall be the <u>sole</u> responsibility of the Contractor to ensure the delivery of adequate and accurate documentation <u>prior</u> to the delivery of materials. Materials incorporated into this project without approved certification and documentation will not be recommended for payment by the Resident Engineer. It shall be the <u>sole</u> responsibility of the Contractor to provide certification that <u>ALL</u> materials to be used on the project meet the "Buy American" requirements.

The certification shall be submitted as part of the shop drawing submittal.

# SECTION 70 – LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

#### 70-08 PUBLIC CONVENIENCE AND SAFETY

ADD: At end of the Section:

The contractor shall provide, install and maintain any warning signs (trucks entering highway, etc.) as required by the Illinois Department of Transportation and the Village of Wheeling and/or the responsible agency that maintains the roadway. The cost of the warning signage as required by the agency responsible for the roadway for the duration of the contract shall be at no additional cost to the contract.

#### 70-16 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS

REVISE: The 2<sup>nd</sup> paragraph as follows:

"..., the approximate locations and owners have been indicated on the plans."

ADD: After the 8<sup>th</sup> paragraph:

The following table includes contact numbers that may provide assistance for locating cable. The personnel listed in the table are in no way responsible for damage to existing utilities.

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

Utility Service or Facility	Contact (Person)	Contact (Phone)
AT&T – Telephone Cables	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
ComEd - Electric Cables	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
City Of Prospect Heights Water, Sanitary and Storm Sewer	Operations and Maintenance – City of Prospect Heights	1-847-459-0588
NICOR - Gas Lines	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
FAA Control and Communication Cables	FAA Sector Office	1-630-587-7801
Illinois-American Water Company – Water, Sanitary and Storm Sewer	Supervisor of Construction	1-630-739-8810
Village of Wheeling – Water, Sanitary and Storm Sewer	Operations and Maintenance	1-847-459-2985
Metropolitan Water Reclamation District of Greater Chicago	Field Office Personnel	1-708-588-4055
Miscellaneous Communication Cables	Signature Flight Group Ray Moreno	1-847-561-7078
	Atlantic Aviation Mike Kurgan	1-847-808-0812

# CHICAGO EXECUTIVE AIRPORT

REPLACE: Paragraph 11<sup>th</sup> with;

If, in the Contractor's opinion, additional assistance is needed to locate the utility service or facility, the contractor shall enlist the assistance of a qualified technician or professional utility location firm to accurately locate underground utilities or facilities prior to excavation. Prior to commencing this detailed location work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such owner of his/her plan of operation and request the presence of a representative of the owner to observe the work. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer.

Only after the investigation has been made should the Contractor begin excavation operations. Upon beginning these operations, the Contractor shall use extreme caution in the methods utilized. The Contractor shall utilize exploratory trenching or small tool excavation practices when beginning operations in critical areas to verify that the utilities are clear of the area of interest or to verify the location and depth of these facilities.

Any utility damaged by the Contractor shall be repaired by the Contractor to the satisfaction of the Owner and shall be at the cost of the Contractor. In the event that an existing utility is damaged during construction, all other work on the project shall be suspended until the utility is repaired. No additional time will be awarded to the Contractor for delays in the project due to damaged utilities. It is a high priority to the airport that all existing Airport utilities, unless otherwise noted in the plans, remain in good working condition throughout the duration of the project.

Special care shall be taken on all operations and particularly near pavement edges to avoid damage to edge lights and all underground electrical cable at 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/her 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/her 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.

# 70-25 CONTRACTOR'S RESPONSIBILITY FOR SAFETY DURING CONSTRUCTION

## ADD:

e. Review the requirements in AC 150/5370-2 (current edition) and comply with items listed as Contractor's responsibility.

f. Implement a CSPP and SPCD as required in AC 150/5370-2 (current edition) and ensure that construction personnel are familiar with operational safety procedures and regulations at the Airport.

g. Provide a 24-hour point of contact that will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the Airport.

h. Provide a safety officer/construction inspector(s) trained in airport safety to maintain the CSPP and SPCD and to monitor all construction activities.

i. Restrict movement of construction vehicles to construction areas by flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate.

j. 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

#### 80-04 LIMITATION OF OPERATIONS

#### ADD: After the 4<sup>th</sup> paragraph:

A minimum distance shall be maintained between construction operations and the centerline of all active taxiways, taxilanes and runways as noted on the Construction Safety and Phasing Plan. It is intended to plan, conduct, and complete the work in these critical traffic areas in such a manner that the length and amount of interruption to aircraft traffic at the Airport is minimized.

The Contractor shall comply with Federal Aviation Regulations and with all rules and regulations of the Airport, including, but not limited to, control and access to the airfield by Contractor's, employees and agents. In the event the Authority is assessed a fine by the Federal Aviation Administration for breach of security resulting from actions of Contractor's employees and agents, the Contractor shall fully reimburse the Authority for the amount of such fine in the form of additional rents.

Work within a Runway Safety Area (RSA) and Taxiway Object Free Area (TOFA) will require closure of the Runway or Taxiway as shown in the Construction Safety and Phasing Plan. Runway closure markers shall be placed prior to initiating work. The Contractor shall place barricades at all locations shown on the plans. Any cable or unit duct protruding from the ground shall be secured flat using sand bags or other methods approved by the Resident Engineer.

#### 80-07 TEMPORARY SUSPENSION OF THE WORK

REVISE the 2<sup>nd</sup> 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 their 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.

#### 80-08 DETERMINATION AND EXTENSION OF CONTRACT TIME

ADD: After the 4<sup>th</sup> paragraph:

The Engineer will make charges against Contract Time after the presumptive completion of the entire project as provided for in Section 50-16, Final Inspection.

ADD: After the last paragraph of this section:

For this project, the following number of calendar days available for work per month has been assumed to be:

Month	Workable Calendar Days
January	0
February	0
March	0
April	0
May	15
June	17
July	17
August	17
September	16
October	16
November	14
December	0

For an extension of contract time due to inclement weather to be considered, the actual total number of calendar days available for work on controlling items must be less than the total number of workable calendar days assumed for the duration of the contract.

Requests for extension of contract time on calendar day projects caused by inclement weather, shall, as a minimum, be supported with National Weather Bureau data and project diaries. Requests for extension of contract time due to inclement weather will not be considered until after final acceptance.

As part of the request for contract time extension review, consideration may be given to how timely the Contractor prosecuted the work up to the point of the delays and the efforts by the Contractor to get back on schedule including the addition of labor or equipment and the extension of work hours and workdays.

No allowance will be made for anticipated profits.

ADD: The following section:

# 80-14 CONTRACTOR'S ACCESS TO AIRFIELD

The location of an area for parking by the Contractor's employees shall be as shown on the plans or as agreed to by the Airport.

Use of personal vehicles beyond the airport perimeter fence line will not be allowed.

When not in use, the Contractor's vehicles and equipment shall park in the location shown on the plans or in an area outside the Runway Safety Areas (RSAs), Runway Object Free Zones (ROFZs), and Object Free Area (OFAs). The Contractor's vehicles and equipment shall not be parked on a closed taxiway or runway. Parking equipment shall not obstruct any runway visual aids, signs or navigational aids or penetrate Part 77 surfaces.

ADD: The following section:

#### 80-15 SECURITY DURING CONSTRUCTION

As a minimum, the Contractor shall be responsible for security during construction as follows:

1. Visibly delineate his construction zone by placing a line of barricades or flagging around the entire work zone.

2. Keep construction personnel inside the work area delineated by barricades.

3. Ensure that construction personnel are familiar with security procedures and regulations at the Airport.

4. Restrict movement of construction vehicles to construction areas by flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate or as shown in plans.

5. The Contractor shall be required to maintain security at the Airport as specified or as directed by the Airport.

6. The Contractor shall provide a complete list of personnel that will be employed while on site and update the list as needed. The contractor shall limit access to the AOA. The Contractor shall be responsible for monitoring the access gate during work hours. If the Contractor chooses to leave the gate open, then he/she shall monitor the gate to prevent unauthorized entries.

7. The contractor shall provide his/her own padlock to secure the gate used for access.

# SECTION 90 – MEASUREMENT AND PAYMENT

#### 90-06 PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT

ADD the following to subsection B.6. 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.

# PART 2 – GENERAL CONSTRUCTION ITEMS

# ITEM 102 – TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL

# MATERIALS

#### 102-2.1 GRASS

REVISE to read:

Grass that will not compete with the grasses sown later for permanent cover per Item 901 titled SEEDING shall be a quick-growing species (such as oats or winter wheats) suitable to the area providing a temporary cover. Selected grass species shall not create a wildlife attractant.

#### 102-2.9 INLET AND PIPE PROTECTION

ADD:

Inlet filter sediment traps shall be placed in all existing inlets and catch basins as shown on the plans or as directed by the Resident Engineer.

ADD: The following section:

#### 102-2.13 EROSION CONTROL BLANKET

Erosion control blanket shall conform to Article 1081.10(a) of the Standard Specifications for Road and Bridge Construction. The blanket shall be secured with biodegradable stakes in accordance with Article 1081.10(e). Metal staples and/or stakes will not be allowed.

#### CONSTRUCTION REQUIREMENTS

#### 102-3.5 RIPRAP

REVISE: 1<sup>st</sup> paragraph to read:

Prior to placement of the riprap material, the Contractor will undercut the designated area 18 inches below finish grade. The undercut material will be used as embankment fill material. The riprap course will be 18 inches in total, including 6-inch bedding.

ADD: The following section:

#### 102-3.11 EROSION CONTROL BLANKET

Erosion Control Blanket shall be placed in accordance with Article 251.04 of the Standard Specifications for Road and Bridge Construction.

Within 24 hours from the time seeding has been performed, the blanket shall be placed. Prior to placing the mat or blanket, the areas to be covered shall be relatively free of all rocks or clods over 1-½ inches in diameter, and all sticks or other foreign material that will prevent the close contact of the mat or blanket with the seed bed. If, as a result of rain, the prepared seed bed becomes crusted or eroded,

or if the eroded places, ruts or depressions exist for any reason, the Contractor will be required to rework the soil until it is smooth and to reseed such areas which are reworked. After the area has been properly shaped, fertilized and seeded, the mat or blanket shall be laid out flat, evenly and smoothly, without stretching the material.

The blanket shall be laid in accordance with the manufacturer's recommendations. All ends and edges shall be tightly butted together.

The blanket shall be held in place by means of stakes. The stakes shall be driven at a 90-degree angle to the plane of the soil. Stakes shall be spaced not more than 3 feet apart in 3 rows for each strip, with a row along each edge and one row alternately spaced in the middle. All ends shall be fastened by stakes spaced 6 inches apart across the width.

Once turf growth has been established, all non-biodegradable components shall be removed by the contractor. This would include any item that would interfere with the mowing of the new turf or which might damage mowing equipment. Furthermore, the contractor shall fill with topsoil or smoothly grade any ruts or gullies that developed during the turf grow in period to the satisfaction of the Owner. This work shall be considered incidental to this item.

# METHOD OF MEASUREMENT

DELETE: Sections 102-4.1 through 102-4.3, and 102-4.6.

# <u>102-4.4</u>

REVISE:

Fertilizer will not be measured for payment and shall be considered incidental to the seeding pay item in order to promote growth as recommended by the Contractor.

# <u>102-4.7</u>

# **REVISE:**

The quantity of temporary ditch checks shall be measured for payment per each as specified, completed, and accepted by the Resident Engineer.

#### <u>102-4.10</u>

# **REVISE**:

Filter fabric will not be measured for payment and shall be considered incidental to the riprap pay item.

ADD: The following sections:

# <u>102-4.12</u>

Erosion control blanket shall be measured for payment per the number of square yards as specified, completed, and accepted by the Resident Engineer.

# <u>102-4.13</u>

Temporary seeding, stabilized construction entrances, ditch checks, temporary mulching and any other erosion control measures required at the Contractor's staging and storage areas and haul route shall not be measured for payment but shall be considered incidental to the contract.

# **BASIS OF PAYMENT**

# <u>102-5.1</u>

REVISE: This section to read:

Temporary seeding, stabilized construction entrances, ditch checks and temporary mulching and any other erosion control measures required at the Contractor's staging and storage areas and haul route shall not be measured for payment, but shall be considered incidental to the contract.

Payment will be made under:

ITEM AR156510	SILT FENCE – PER FOOT.
ITEM AR156520	INLET PROTECTION – PER EACH.
ITEM AR156531	EROSION CONTROL BLANKET – PER SQUARE YARD.

Additive Alternate No. 1:

ITEM AS156510	SILT FENCE – PER FOOT.
ITEM AS156511	DITCH CHECK – PER EACH.
ITEM AS156520	INLET PROTECTION – PER EACH.
ITEM AS156531	EROSION CONTROL BLANKET – PER SQUARE YARD.
ITEM AS156540	RIPRAP – PER SQUARE YARD.

# **ITEM 105 – MOBILIZATION**

# DESCRIPTION

# <u>105-1.1</u>

REVISE the 3<sup>rd</sup> paragraph to read:

This item also includes all efforts related to restoration of the project site, staging areas and haul roads as directed in the bidding documents at the conclusion of the job. This activity includes, but is not limited to, incidental grading, seeding and clean-up, as required to restore the project site to its original condition at no additional cost to the contract.

## **BASIS OF PAYMENT**

<u>105-3.1</u>

ADD:

Payment will be made under:

# ITEM AR150520 MOBILIZATION – PER LUMP SUM.

# ITEM 150 – RESIDENT ENGINEER FIELD OFFICE

## **CONSTRUCTION METHODS**

#### <u>150-2.1</u>

REVISE: First sentence to read:

Field offices shall have a minimum ceiling height of seven (7) feet and a minimum floor space of 240 square feet.

#### **REVISE**:

Paragraph (h.) to the following:

(h.) One (1) dry process copy machine (including maintenance and operating supplies) capable of both collating and reproducing prints up to a half size (11"X 17") and capable of copying field books.

DELETE: (m.)

ADD:

- (m.) One first-aid cabinet fully equipped.
- (n.) One (1) 800 Watt, 0.8 cubic foot microwave oven.
- (o.) One (1) Coffee Maker
- (p.) Solid waste disposal consisting of two (2) 28-quart waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.
- (q.) One (1) internet access account for use by the Engineer with a minimum advertised download speed of up to 768 Kbps and a minimum advertised upload speed of up to 384 Kbps. The type of internet access chosen by the Contractor shall allow for simultaneous use of the internet connection, landline telephone, and facsimile machine. Any required modems, broadband cards or other equipment needed for connecting a desktop or laptop computer to the type of internet connection selected by the Contractor shall also be provided by the Contractor.

#### **BASIS OF PAYMENT**

# <u>150-4.1</u>

ADD:

Payment will be made under:

# ITEM AR150510 ENGINEER'S FIELD OFFICE – PER LUMP SUM.

# PART 3 – SITEWORK

# ITEM 101 – PREPARATION/REMOVAL OF EXISTING PAVEMENTS

# **DESCRIPTION**

# <u>101-1.1</u>

ADD:

This item shall consist of variable depth pavement milling and full-depth bituminous pavement removal at the locations shown on the plans.

The type of material to be removed along with an approximate typical pavement section is shown on the plans. Pavement structure information was taken from airport records, data supplied by airport personnel and soil borings. The Contractor shall verify the type and thickness of material to be removed. No extra compensation will be allowed for any variations in the pavement sections actually encountered.

## CONSTRUCTION

#### 101-3.1 REMOVAL OF EXISITNG PAVEMENT

ADD to (b.) Asphalt pavement removal:

If additional pavement is removed due to the negligence of the Contractor, the additional quantity of pavement removal and replacement will not be measured for payment.

#### METHOD OF MEASUREMENT

DELETE: Sections 101-4.2 through 101-4.5 and Section 101-4.7.

# **BASIS OF PAYMENT**

<u>101-5.1</u>

ADD:

Payment will be made under:

# ITEM AR401650BITUMINOUS PAVEMENT MILLING – PER SQUARE YARD.ITEM AR401900REMOVE BITUMINOUS PAVEMENT – PER SQUARE YARD.

# ITEM 152 – EXCAVATION, SUBGRADE, AND EMBANKMENT

#### DESCRIPTION

#### <u>152-1.1 GENERAL</u>

ADD:

The source of the offsite fill materials shall be approved by the Engineer. All material brought to the site shall be documented as uncontaminated in accordance with the Clean Construction or Demolition Debris (CCDD) section below.

This item shall also consist of repairing subgrade that shows signs of pumping, major deflection, or failure to pass a proof roll of the lime-modified subgrade. Areas to be repaired shall be designated by the Resident Engineer using the discretionary quantity estimated during design. This work shall consist of removing the existing 12 inches of subgrade material and replacing it with porous granular embankment.

This item shall also include the removal of existing unpaved access road to the ADS-B Tower as detailed in the plans.

All excess material from all contract work shall be hauled offsite at no additional cost to the contract.

Compaction control tests shall be in accordance with AASHTO T 99 (Standard Proctor) for aircraft weights less than 60,000 pounds.

#### 152-1.2 DIGITAL TERRAIN MODEL (DTM)

DELETE: This section and replace with the following:

The profiles and staking information shown in the bid set plans shall be the line and grade for control of the staking work. The Contractor may be provided DTM information to assist with the development of their survey staking and layout model, but this information will not be considered a contract document. The Project Engineer may provide this information after the Contractor has indemnified the Project Engineer from irregularities between the contract documents and the DTM.

#### 152-1.3 CLASSIFICATION

DELETE: Paragraphs b, c, and d.

ADD: New section:

#### 152-1.6 CLEAN CONSTRUCTION OR DEMOLITION DEBRIS

#### PROJECT CONDITIONS

- A. Prior to bidding, the bidder shall make a site visit to become familiar with the current conditions. He shall also determine the accessibility and assess safety measures that will be necessary to perform the contract work.
- B. Material Sampling and Analysis:

1. The Contractor shall provide his own sampling and analysis in compliance with applicable laws, prior to offsite disposal of all materials. This cost shall be borne by the Contractor at no additional expense to the Owner.

#### REGULATORY REQUIREMENTS

- A. The Contractor shall comply with all applicable local, state and federal laws and regulations with regard to material removal, handling and disposal, and shall pay all assessed costs and fees.
- B. The Contractor shall comply with the Illinois Environmental Protection Act, as amended by Public Act 096-1416 that was signed in to law on July 30, 2010, Public Act 097-0137 that was signed in to law on July 14, 2011, and all applicable amendments of the Illinois Environmental Protection Act.

# SUBMITTALS

- A. Contractor shall submit a Clean Construction or Demolition Debris (CCDD) & Soil Removal and Disposal Plan to the Engineer. Submit the following as a minimum:
  - 1. A list of all construction or demolition debris anticipated to be generated requiring disposal.
  - 2. The anticipated quantity (both in tons and in cubic yards) of construction or demolition debris to be disposed of and identification of disposal facility including address and contact information.
  - 3. The anticipated quantity (both in tons and in cubic yards) of surplus soil to be disposed of, and identification of disposal facility including address and contact information.

CCDD testing shall be by the Contractor, as a minimum, the Contractor shall submit the following:

- 1. Proposed Testing Program to establish that the surplus soil is uncontaminated, for compliance with the requirements of the Illinois Environmental Protection Act. Include details of intended testing program, and rate of sampling (number of samples based on total quantity of surplus soil generated).
- 2. Credentials of the testing Lab that will perform the testing, and credentials of the Illinois Licensed Professional Engineer or Illinois Licensed Professional Geologist that will complete all required certification forms.
- 3. Results of the Proposed Testing Program.
- 4. If further CCDD testing is deemed necessary by the Contractor's chosen disposal facility, the Contractor shall complete this testing at no additional cost to the contract.

#### GENERAL

- A. The following work shall be included:
  - 1. Removal, handling and legal offsite disposal of all construction or demolition debris generated from all contract work, considering it to be clean construction or demolition debris (CCDD).

- 2. Removal, handling and legal offsite disposal of surplus soil generated from all contract work, considering it to be uncontaminated.
- 3. Debris and surplus soil disposal shall include any onsite drying of the material as required, so that the material will pass the paint-filter test as per Method 9095B in USEPA's publication SW 846, prior to transportation.
- 4. Any costs and fees for legally-permitted-facilities accepting clean construction or demolition debris (CCDD), and/or uncontaminated surplus soil.
- 5. Additional sampling and testing of surplus soil to establish that it is uncontaminated, and certification to that effect by an Illinois Licensed Professional Engineer or an Illinois Licensed Professional Geologist using Form LPC-663, both as required by law and as required by the site accepting the material.
- 6. Any other applicable work, costs and fees as required by local, state and federal laws.

MATERIAL CHARACTERIZATION FOR OFFSITE DISPOSAL

A. Costs for any and all testing, sampling, laboratory analysis or any other document that is required by the recipient of the material (disposal site) to establish that the material is uncontaminated, shall be borne by the Contractor at no additional expense to the Owner.

## CONSTRUCTION METHODS

## 152-3.1 GENERAL

REVISE: Paragraph (a) to read:

Blasting will not be permitted.

#### 152-3.2 EXCAVATION

ADD:

The Contractor shall identify any unsuitable subgrade areas through visual inspection and notify the Resident Engineer. Unsuitable areas as identified by the Resident Engineer shall be excavated to a depth below the top of the existing aggregate base course as approved by the Engineer. After excavation, the Contractor shall compact the existing subgrade to the satisfaction of the Resident Engineer.

When excavating subgrade take precaution not to damage any underdrains or utilities that run below the pavement. Care shall also be taken not to disrupt more subgrade than necessary. During this operation, minimize the turning of equipment on the milled surface.

The Contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize ponding of water. The Contractor shall cut temporary ditches or swales to maintain positive drainage. At locations where temporary ditches are not feasible, the Contractor shall excavate stormwater storage areas adjacent to but at a lower elevation than the bottom of the work and utilize mechanical pumps to promptly remove stormwater from the excavations.

#### 152-3.15 TOPSOIL

REVISE the second sentence of paragraph one to the following:

The onsite salvaged topsoil shall meet the requirements of Item 905 Titled TOPSOIL or may be approved at the discretion of the Resident Engineer for use on the project

ADD:

Any excess excavation material shall be hauled offsite at no additional cost to the contract.

ADD: New Section:

# 152-3.19 DUST CONTROL WATERING

This work shall consist exclusively of the control of dust resulting from construction operations and is not intended for use in the compaction of earth embankment.

Dust shall be controlled by the uniform application of sprinkled water and shall be applied as directed by the Resident Engineer, in a manner meeting his approval.

## METHOD OF MEASUREMENT

# 152-4.1 GENERAL

DELETE: 152-4.1b. Embankment.

REPLACE: 152-4.1c Borrow material with the following:

Borrow material shall be paid for on the basis of the number of cubic yards measured in its final position to the lines and grades shown on the plans for use as embankment material.

ADD:

Measurement for payment specified by the cubic yard shall be computed by the average end areas of design cross sections.

Subgrade Repair measured for payment shall be the number of square yards measured in its final position at the locations as directed by the Resident Engineer. Measurement shall include excavation to the depth as shown on the plan details or as required by the Resident Engineer, compaction of exposed subgrade, installation of soil stabilization fabric, and placement/compaction of porous granular embankment (as specified in Section 154) up to the bottom of the proposed aggregate base course.

Dust control watering will not be measured for payment but shall be considered incidental to the contract items for which dust control is required.

Excavation and removal of existing unpaved access road to the ADS-B tower shall not be measured separately, but considered incidental to the Item 152410 Unclassified Excavation.

# BASIS OF PAYMENT

# <u>152-5.1</u>

ADD:

Clean Construction or Demolition Debris (CCDD) removal and disposal, topsoil placement, shoulder fill and embankment fill shall not be paid for separately, but shall be included in the unit bid price for "Unclassified Excavation". The hauling, restoration of haul road, on-site borrow placement, on-site borrow excavation, topsoil stripping and topsoil placement shall not be paid for separately but shall be considered incidental to the pay item for "On-Site Borrow".

Payment will be made under:

ITEM AR152410	UNCLASSIFIED EXCAVATION – PER CUBIC YARD.
ITEM AR152441	ON-SITE BORROW – PER CUBIC YARD.
ITEM AR152540	SOIL STABILIZATION FABRIC – PER SQUARE YARD.
ITEM AR152511	SUBGRADE REPAIR – PER SQUARE YARD.

Additive Alternate No. 1:

ITEM AS152410	UNCLASSIFIED EXCAVATION – PER CUBIC YARD.
ITEM AS152441	ON-SITE BORROW – PER CUBIC YARD.
ITEM AS152540	SOIL STABILIZATION FABRIC – PER SQUARE YARD.
ITEM AS152511	SUBGRADE REPAIR – PER SQUARE YARD.

Additive Alternate No. 2:

ITEM AT152540	SOIL STABILIZATION FABRIC – PER SQUARE YARD.
ITEM AT152511	SUBGRADE REPAIR – PER SQUARE YARD.

# ITEM 154 – SUBBASE COURSE

## **DESCRIPTION**

## <u>154-1.1</u>

ADD:

This item shall consist of Porous Granular Embankment used as an aggregate stabilization base course placed as part of the proposed subgrade repair at the specified thickness as detailed in the plans or as required by the Resident Engineer.

#### MATERIALS

#### 154-2.1 DESCRIPTION

REVISE: 1<sup>st</sup> paragraph to read:

The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.

## 154-2.3 GRADATION REQUIREMENTS

DELETE: This section.

ADD:

The material shall be free from vegetable matter, lumps or clay, and other objectionable or foreign substance.

When submitting materials for consideration, the Contractor shall provide written certification that the material meets the specified requirements. A written gradation shall also be furnished.

Gradation for Subbase Course shall be one of the following gradations:

Subbase Gradation Requirements

Sieve	Percent Passing	
8 inch	-	100
6 inch	-	94-100
4 inch	-	80-100
3 inch	100	-
2 inch	-	20-70
1 1/2 inch	30-76	-
No. 4	0-16	0-20
IDOT Gradation	RR-1	CS-1

# **CONSTRUCTION METHODS**

#### 154-3.2 PREPARING UNDERLYING COURSE

DELETE: This section.

#### 154-3.4 PLACEMENT

DELETE: This section.

ADD:

The porous granular embankment shall be placed in lifts no greater than one (1) foot thick or as directed by the Resident Engineer.

#### 154-3.5 COMPACTION

DELETE: This section.

ADD:

Rolling the top of this replacement material with a vibratory roller meeting the requirements of Section 1101 of the IDOT *Standard Specification for Road and Bridge Construction* should be sufficient to obtain the desired keying or interlock and necessary compaction. The Resident Engineer shall verify that adequate keying has been obtained and that adequate compaction and stability has been attained.

Capping aggregate will not be required when embankment meeting the requirements of Item 209 of the Standard Specifications is placed on top of the subbase course. Capping aggregate (two (2) inch depth) meeting the requirements of Item 209 of the Standard Specifications will be required when embankment meeting the requirements of Item 152 of the Standard Specifications is placed on top of the subbase course.

#### METHOD OF MEASUREMENT

#### <u>154-4.1</u>

DELETE: This section.

ADD:

The excavation to the depth as shown on the plan details or as required by the Resident Engineer, the installation of soil stabilization fabric underneath the porous granular embankment, and the quantity of porous granular embankment shall not be measured separately for payment but shall be included in the contract unit price for 152511, Subgrade Repair.

The Contractor shall furnish approved duplicate load tickets upon which is recorded the net weight of the aggregates in each truck. The Contractor shall submit one (1) load ticket to the Resident Engineer, or his/her duly authorized representative, at the job site when the truck load is incorporated into the base.

# **BASIS OF PAYMENT**

# <u>154-5.1</u>

DELETE: This section.

ADD:

Porous granular embankment and soil stabilization fabric underneath the porous granular embankment will not be paid for separately but shall be included in the contract unit price for Item 152511, Subgrade Repair.

# ITEM 157 – LIME KILN DUST (LKD) TREATED SUBGRADE

#### COMPOSITION OF MIXTURE

#### 157-3.1 SOIL-KILN DUST MIXTURE

REVISE: The 1<sup>st</sup> sentence to read:

Kiln dust shall be added at an application rate of 4% to 6% dry unit weight of soil.

ADD:

The actual required composition of lime shall be established by the Contractor's geotechnical testing firm prior to the construction, using samples of the proposed soil and lime, and the Contractor's laboratory design procedure for the lime modified soil at no additional cost to the contract. The Resident Engineer reserves the right to make such adjustments of lime composition as are considered necessary during the progress of the work within the range specified, without additional compensation to the Contractor. Source or type of lime shall not be changed during the progress of the work without permission of the Resident Engineer.

#### WEATHER LIMITATIONS

#### 157-4.1 WEATHER LIMITATION

REVISE: The 3<sup>rd</sup> sentence to read:

Do not apply kiln dust unless the air temperature is at least 40°F (4°C) and rising.

#### CONSTRUCTION METHODS

#### 157-6.6 COMPACTION

REVISE to read:

The moisture content shall be within the tolerance as specified in paragraph 157-3.2. The field density of the compacted mixture shall be at least 95% of the maximum density as specified in paragraph 157-6.10. Compaction of the soil/cement mixture shall begin within 1 to 4 hours after mixing the LKD into the subgrade. All compaction operations shall be completed within 3 to 6 hours from the start of mixing. Perform in-place density test immediately after completion of compaction to determine compaction. If the material fails to meet the density requirements, compaction shall continue or the material shall be removed and replaced. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

Contractor shall provided representative proctor for the lime modified soil. All associated labor, equipment, materials and incidentals associated with obtaining the Proctor information shall be considered incidental to the contract and as a subsidiary obligation of the Contractor. If, in the opinion of the Resident Engineer, the Proctor information is determined to be non-representative of the material being placed, the Resident Engineer may require the Contractor to provide an additional Proctor that is representative of the materials used. The proctor shall be provided in accordance with AASHTO T 99 at no additional cost to the contract.

## METHOD OF MEASUREMENT

#### <u>157-7.1</u>

**REVISE** to read:

The amount of kiln dust treated subgrade shall be based on the number of square yards complete and accepted. The price shall be full compensation for all preparation, delivering, placing and mixing these materials, and all labor, equipment, tools and incidentals necessary to complete this item.

The amount of kiln dust used is based upon the application rate as determined in paragraph 157-3.1.

#### BASIS OF PAYMENT

#### <u>157-8.1</u>

REVISE to read:

Payment shall be made at the contract unit price as specified in paragraphs 157-7.1 and 156-7.2 of this section for the kiln dust treated subgrade for the thickness specified. The price shall be full compensation for furnishing all material, and for all preparation, delivering, placing and mixing these materials, and all labor, equipment, tools and incidentals necessary to complete this item.

ADD:

Payment will be made under:

ITEM AR155712LIME-MODIFIED SUBGRADE – 12" – PER SQUARE YARD.ITEM AR800182LIME KILN DUST – PER TON.

#### Additive Alternate No. 1:

ITEM AS155712LIME-MODIFIED SUBGRADE – 12" – PER SQUARE YARD.ITEM AS800182LIME KILN DUST – PER TON.

Additive Alternate No. 2:

ITEM AT155712	LIME-MODIFIED SUBGRADE – 12" – PER SQUARE YARD.
<b>ITEM AT800182</b>	LIME KILN DUST – PER TON.

# PART 4 – BASE COURSES

# ITEM 209 – CRUSHED AGGREGATE BASE COURSE

# DESCRIPTION

#### <u>209-1.1</u>

ADD:

This item shall also consist of 4, 5 and 7 inches of crushed aggregate base course placed as detailed in the plans or as directed by the Resident Engineer.

#### MATERIALS

## 209-2.1 CRUSHED AGGREGATE BASE

DELETE: Paragraph C; Crushed slag.

## **CONSTRUCTION METHODS**

#### 209-3.9 ACCEPTANCE SAMPLING AND TESTING

REVISE: 1<sup>st</sup> sentence of 2<sup>nd</sup> paragraph as follows:

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per AASHTO T 99 for areas designated for aircraft with gross weights of 60,000 pounds or less.

#### **BASIS OF PAYMENT**

#### <u>209-5.1</u>

ADD:

Payment will be made under:

ITEM AR209604	CRUSHED AGG. BASE COURSE – 4" – PER SQUARE YARD.
ITEM AR209605	CRUSHED AGG. BASE COURSE – 5" – PER SQUARE YARD.
<b>ITEM AR209607</b>	CRUSHED AGG. BASE COURSE – 7" – PER SQUARE YARD.

#### Additive Alternate No. 1:

ITEM AS209607 CRUSHED AGG. BASE COURSE – 7" – PER SQUARE YARD.

# Additive Alternate No. 2:

ITEM AT209607 CRUSHED AGG. BASE COURSE – 7" – PER SQUARE YARD.

# PART 6 – FLEXIBLE PAVEMENTS

# ITEM 401 – ASPHALT MIX PAVEMENT SURFACE COURSE

# DESCRIPTION

# <u>401-1.1</u>

ADD:

This project shall utilize Method I for the production, placement and acceptance of the bituminous surface course.

#### MATERIALS

## 401-2.3 ASPHALT BINDER

ADD: The following after the 1<sup>st</sup> paragraph of this section:

Asphalt Binder Selection Table – IDOT Districts 1-6 (Apron) under 60,000 pounds criteria shall apply.

# **COMPOSITION**

#### 401-3.3 JOB MIX FORMULA (JMF)

ADD: The following after the 6<sup>th</sup> paragraph of this section:

Asphalt Design Criteria Table - Aircraft under 60,000 pounds (Apron) criteria shall apply. Target air voids (AV) shall be 3% for the mixture.

#### CONSTRUCTION METHODS

#### 401-4.10 JOINTS

ADD: After the 1<sup>st</sup> paragraph of this section:

At any time during the bituminous surface course paving operation it becomes necessary to end a paving lane at a location other than the proposed finished pavement edge because of ending a day's paving, machinery breakdown, etc., the lane end will be sawed back a sufficient distance to provide a smooth, neat appearing joint from which to resume paving. The sawed face will be painted with liquid asphalt and this work shall be considered incidental to Item 401, Bituminous Surface Course, and no additional compensation will be allowed.

# MATERIAL ACCEPTANCE

# 401-6.1 ACCEPTANCE SAMPLING AND TESTING

DELETE: All references to Method II for quantities 2,000 tons and over.

# **BASIS OF PAYMENT**

# <u>401-8.1</u>

DELETE: All references to Method II for quantities 2,000 tons and over.

ADD:

Payment will be made under:

# ITEM AR401610 BITUMINOUS SURFACE COURSE – PER TON.

# Additive Alternate No. 1:

ITEM AS401610 BITUMINOUS SURFACE COURSE – PER TON.

# Additive Alternate No. 2:

ITEM AT401610 BITUMINOUS SURFACE COURSE – PER TON.

# ITEM 403 – ASPHALT MIX PAVEMENT BASE COURSE

#### DESCRIPTION

#### <u>403-1.1</u>

ADD:

This project shall utilize Method I for the production, placement and acceptance of the bituminous base course.

#### MATERIALS

#### 403-2.3 ASPHALT BINDER

ADD: The following after the 1<sup>st</sup> paragraph of this section:

Asphalt Binder Selection Table – IDOT Districts 1-6 (Apron) under 60,000 pounds criteria shall apply.

#### COMPOSITION

#### 403-3.3 JOB MIX FORMULA (JMF)

ADD: The following after the 6<sup>th</sup> paragraph of this section:

Asphalt Design Criteria Table - Aircraft under 60,000 pounds (Apron) criteria shall apply. Target air voids (AV) shall be 3% for the mixture.

#### **CONSTRUCTION METHODS**

#### 403-4.10 JOINTS

ADD: After the 1<sup>st</sup> paragraph of this section:

At any time during the bituminous base course paving operation it becomes necessary to end a paving lane at a location other than the proposed finished pavement edge because of ending a day's paving, machinery breakdown, etc., the lane end will be sawed back a sufficient distance to provide a smooth, neat appearing joint from which to resume paving. The sawed face will be painted with liquid asphalt and this work shall be considered incidental to Item 403, Bituminous Base Course, and no additional compensation will be allowed.

#### **MATERIAL ACCEPTANCE**

#### 403-6.1 ACCEPTANCE SAMPLING AND TESTING

DELETE: All references to Method II for quantities 2,000 tons and over.
### **BASIS OF PAYMENT**

### <u>403-8.1</u>

DELETE: All references to Method II for quantities 2,000 tons and over.

ADD:

Payment will be made under:

ITEM AR403610 BITUMINOUS BASE COURSE – PER TON.

# Additive Alternate No. 1:

ITEM AS403610 BITUMINOUS BASE COURSE – PER TON.

# Additive Alternate No. 2:

ITEM AT403610 BITUMINOUS BASE COURSE – PER TON.

# PART 7 – RIGID PAVEMENT

# ITEM 501 – CEMENT CONCRETE PAVEMENT

### **MATERIALS**

### 501-2.12 MATERIAL FOR CURING CONCRETE

DELETE: Paragraphs (b) and (c).

### CONCRETE MIX

#### 501-3.2 CONCRETE MIX PROPORTIONS

DELETE: All references to aircraft gross weights greater than 60,000 pounds.

ADD:

At the Contractor's option, an Illinois Department of Transportation (IDOT) Standard Specifications Section 420 Portland Cement Concrete Class PV concrete generated by the IDOT Division of Highways with recent substantiating test and strength data can be submitted the Contractor for approval by the Engineer.

Test batch is not required.

### **CONSTRUCTION METHODS**

DELETE: 501-4.1 Test batch.

# MATERIAL ACCEPTANCE

### 501-6.1 QUALITY ASSURANCE (QA) ACCEPTANCE SAMPLING AND TESTING

REVISE to read:

Testing shall comply with Illinois Department of Transportation, Aeronautics Policy Memorandum (PM) 96-1A, *Item 610, Structural Portland Cement Concrete: Job Mix Formula Approval & Production Testing.* 

#### 501-6.2 STRENGTH ACCEPTANCE TESTING

ADD:

If an IDOT Class PV concrete mix is used, compressive strength acceptance tests or flexural strength acceptance tests shall be performed in accordance with Illinois Department of Transportation (IDOT) Standard Specifications Section 1020 Portland Cement Concrete Class PV concrete.

### BASIS OF PAYMENT

ADD:

Payment will be made under:

# ITEM AR501506 6" PCC PAVEMENT – PER SQUARE YARD.

# PART 9 - MISCELLANEOUS

# ITEM 602 – EMULSIFIED ASPHALT PRIME COAT

# **CONSTRUCTION METHODS**

### 602-3.4 APPLICATION OF EMULSIFIED ASPHALT MATERIAL

ADD: The following to the 2<sup>nd</sup> paragraph:

Areas worn from hauling operations shall be re-tacked at no additional cost to the Contract.

### **BASIS OF PAYMENT**

#### <u>602-5.1</u>

ADD:

Payment will be made under:

ITEM AR602510 BITUMINOUS PRIME COAT – PER GALLON.

Additive Alternate No. 1:

ITEM AS602510 BITUMINOUS PRIME COAT – PER GALLON.

# Additive Alternate No. 2:

ITEM AT602510 BITUMINOUS PRIME COAT – PER GALLON.

# ITEM 603 – EMULSIFIED ASPHALT TACK COAT

### DESCRIPTION

### <u>603-1.1</u>

ADD:

This item shall consist of placing bituminous tack coat between lifts of bituminous pavement as part of the proposed pavement structure at the locations shown on the plans.

### **BASIS OF PAYMENT**

### <u>603-5.1</u>

ADD:

Payment will be made under:

ITEM AR603510 BITUMINOUS TACK COAT – PER GALLON.

Additive Alternate No. 1:

ITEM AS603510 BITUMINOUS TACK COAT – PER GALLON.

Additive Alternate No. 2:

ITEM AT603510 BITUMINOUS TACK COAT – PER GALLON.

# ITEM 605 – JOINT SEALANTS FOR PAVEMENTS

### MATERIALS

### <u>605-2.1</u>

DELETE: Paragraphs (a) and (b).

### CONSTRUCTION METHODS

### 605-3.4 INSTALLATION OF SEALANTS

ADD:

Sealant which does not bond to the concrete and bituminous surface of the joint walls, contains voids, or fails to set to a tack-free condition will be rejected and replaced by the Contractor at no additional cost. During the course of the work any batches that do not have good consistency for application shall be replaced. Excess sealant on the pavement surface shall be immediately removed.

### METHOD OF MEASUREMENT

#### <u>605-4.1</u>

DELETE: Entire Paragraph and REPLACE with:

The joint sawing and sealing for the proposed concrete asphalt interface and proposed concrete around manhole-special shall be included in the costs for Item 501. No separate measurement for payment will be made for this item.

### **BASIS OF PAYMENT**

### <u>605-5.1</u>

DELETE: Entire Paragraph and REPLACE with:

Payment for joint sealing between the new PCC Pavement and new HMA Pavement and around manhole-special shall be included in the costs for Item 501.

# ITEM 610 – CONCRETE FOR MISCELLANEOUS STRUCTURES

### DESCRIPTION

### <u>610-1.1</u>

ADD:

This item shall consist of furnishing and installing structural concrete for tie-down foundations or for any other item requiring concrete as shown on the plans.

### CONSTRUCTION METHODS

ADD: New Section:

### 610-3.15 PLACING CONCRETE

Holes cored for tie-down foundations shall be to the depth and sizes indicated on the plans or as required by the manufacturer. The Resident Engineer shall be given the opportunity to inspect footings prior to concrete placement. Footings found to be insufficient in either depth or diameter shall be corrected prior to the concrete placement.

### METHOD OF MEASUREMENT

ADD: New Sections:

#### <u>610-5.2</u>

The quantities of structural Portland Cement Concrete used for tie-down foundations or for any other incidental concrete work shall not be measured for payment but shall be considered incidental to the associated pay items.

### <u>610-5.3</u>

Excavation required for the installation of the tie-down foundations or for any other incidental concrete construction shall not be measured for payment, but shall be considered incidental to the associated pay items. Excess materials shall be hauled off the Airport property at no additional cost to the contract. Backfilling along edges of exposed concrete shall be considered incidental.

#### **BASIS OF PAYMENT**

### <u>610-6.1</u>

ADD:

No direct payment shall be made for excavation required for the placement of any structural Portland Cement Concrete, be it excavation for tie-down foundations or for any other incidental concrete installation.

No direct payment shall be made for steel reinforcement or for joint sawing and sealing. Steel reinforcement shall be considered incidental to the associated pay items.

Structural Portland Cement Concrete used for any other purpose on this project shall not be paid for, but shall be considered incidental to the associated pay items.

# ITEM 620 – RUNWAY AND TAXIWAY MARKING

### MATERIALS

### 620-2.2 MARKING MATERIALS

ADD:

Paint type shall be Waterborne Type I or II.

### 620-2.3 PAINT

DELETE:

Paragraphs (b.) Epoxy, (c.) Methacrylate, (d.) Solvent-Base and (e.) Preformed Thermoplastic Airport Pavement Markings.

### CONSTRUCTION METHODS

### 620-3.5 APPLICATION

REVISE the 1<sup>st</sup> paragraph to read:

Paint shall be applied in two applications. The first application will occur once the surface course or seal coat is in place and accepted by the Resident Engineer. This first application shall be applied at the Temporary Marking Waterborne application rate specified in 620-2.2, Table 1 and will not contain glass beads. If indicated in the contract documents, a black border will not be applied as part of the first application. A period of thirty days shall elapse between the placement of the first paint application rate specified in 620-2.2, Table 1 and splication and second paint application. The second application shall be applied at the Waterborne application rate specified in 620-2.2, Table 1 and shall contain glass beads. Glass beads shall not be applied to black paint. Paint shall be applied at the locations and to the dimensions and spacing as specified in the contract documents. Paint shall not be applied until the layout and condition of the surface has been approved by the Resident Engineer.

### METHOD OF MEASUREMENT

### <u>620-4.1</u>

REVISE to read:

The quantity of permanent markings to be paid for shall be the number of square feet of painting with the specified material **measured only once to apply two coats** in conformance with the specifications and accepted by the Resident Engineer. Quantities will not be distinguished between different colors of paint except for the black border.

Preparation of pavement markings prior to remarking shall not be paid separately but considered incidental to the new pavement marking installation.

### **BASIS OF PAYMENT**

### <u>620-5.1</u>

ADD:

Payment will be made under:

# ITEM AR620520PAVEMENT MARKING – WATERBORNE – PER SQUARE FOOT.ITEM AR620525PAVEMENT MARKING – BLACK BORDER – PER SQUARE FOOT.

Additive Alternate No. 1:

ITEM AS620520	PAVEMENT MARKING – WATERBORNE – PER SQUARE FOOT.
<b>ITEM AS620525</b>	PAVEMENT MARKING – BLACK BORDER – PER SQUARE FOOT.

Additive Alternate No. 2:

<b>ITEM AT620520</b>	PAVEMENT MARKING – WATERBORNE – PER SQUARE FOOT.
<b>ITEM AT620525</b>	PAVEMENT MARKING – BLACK BORDER – PER SQUARE FOOT.

# ITEM 680 – TIE DOWN AND GROUND ROD

# DESCRIPTION

### <u>680-1.1</u>

ADD:

Materials required for this item shall include mooring eyes and all necessary anchor rods and 610 concrete to install and secure mooring eyes.

# BASIS OF PAYMENT

### <u>680-5.1</u>

ADD:

Payment will be made under:

ITEM AR510510 TIE DOWN – PER EACH.

Additive Alternate No. 1:

ITEM AS510510 TIE DOWN – PER EACH.

Additive Alternate No. 2:

ITEM AT510510 TIE DOWN – PER EACH.

# ITEM 760 – WATER MAIN

# DESCRIPTION

### <u>760-1.1</u>

This work shall consist of furnishing all labor, equipment, and materials necessary to remove existing above-ground fire hydrant and install new flush-mounted fire hydrant in accordance with Section 602 of the IDOT "Standard Specifications for Road and Bridge Construction", latest edition and as specified herein.

Select granular backfill will be incidental to this item.

The hydrants shall be connected to the potable water main. Connections shall be in accordance with the "Standard Specifications for Water and Sewer Construction in Illinois Specifications" 8<sup>th</sup> Edition, 2020 as they relate to water main, water main fittings, valves, etc.

The existing water valve boxes shall be adjusted to the proposed finished grade and shall have a concrete pad constructed as detailed on the plans and as specified herein.

All watermain work shall conform to Village of Wheeling Standards.

### **MATERIALS**

### 760-2.2 BEDDING

Bedding shall meet the IDOT CA-7 gradation unless otherwise approved by the Engineer. The bedding shall be mechanically tamped into place.

### 760-2.3 BACKFILL

The material used for select granular backfill shall be aggregate meeting the requirements of IDOT CA-7 gradation set forth in Item 208.

### 760-2.4 FLUSH-MOUNTED FIRE HYDRANT

Flush-mounted fire hydrant shall meet the standards of AWWA C502. The hydrant shall be furnished with a main valve opening of 5 1/4". Rated working pressure shall be 150 psi and each hydrant shall be hydrostatically tested to meet a pressure of 300 psi. The hydrant shall be flush type for concealment at grade. Flush-mounted hydrant shall be furnished with a cast iron box and cover for easy access. The inlet connection shall be mechanical joint with a 6" inlet. The hydrant shall have a two 2 1/2" hose nozzle with threads to match the Chicago Executive Airport hydrant thread, National Standard Thread, and one 4 1/2" steamer nozzle. Contractor shall verify and coordinate thread style and pitch. The one-year warranty provisions of the contract apply to this hydrant and its installation.

The hydrant shall be manufactured by Mueller Flush Mount Model A-415, M&H Flush Type Style 229 or equal.

### 760-2.5 IRON FITTINGS

Fittings shall be cement lined, tar coated ductile iron with mechanical rubber gasketed joints rated 250 psi and conforming to AWWA C-110/ANSI 21.20. (Clow, American, U.S. Pipe or equal). All fittings shall incorporate retainer glands. All Retainer Glands shall be Tyler or Mueller Class 350 Mechanical Joints with Megalugs.

### CONSTRUCTION METHODS

#### 760-3.2 BACKFILL

In paved areas, select granular backfill (from the springline of the pipe to the proposed subgrade) shall be constructed in accordance with the applicable sections of the Specification and shall be considered incidental to the fire hydrant.

After backfilling is completed all trenches shall be compacted by mechanical compaction in no greater than 6" lifts to a minimum of 95% AASHTO T99 for areas designated for aircraft with gross weights of 60,000 pounds or less.

#### 760-3.3 TESTING

The Contractor shall notify the Village of Wheeling and Resident Engineer 48 hours in advance of the testing. A Village of Wheeling representative and Resident Engineer shall be present at all testing.

Contractor shall pressure test by filling the pipe with clean water under a minimum hydrostatic pressure of one hundred fifty (150) pounds per square inch for two (2) hours. The testing shall be in conformance with the "Standard Specifications for Water and Sewer Construction in Illinois," Latest Edition.

After completion of the pressure test the Contractor shall conduct a leakage test to determine the quantity of water lost by leakage under the specified test pressure. The leakage test shall be in conformance with the "Standard Specifications for Water and Sewer Construction in Illinois," Latest Edition and in conformance with Village of Wheeling.

When pressure and leakage tests are completed and prior to being placed into service, the ductile iron pipe and appurtenances shall be disinfected by a method of chlorination approved by the Engineer.

Disinfection of the ductile iron pipe shall conform to the "Standard Specifications for Water and Sewer Construction in Illinois," Latest Edition and per the requirements of the Village of Wheeling.

Any defects, cracks or leakage that may develop or may be discovered, either in the joints or in the body of the castings, shall be promptly repaired by the Contractor at his own expense.

### 760-3.4 FLUSH-MOUNTED FIRE HYDRANT

Hydrant shall be installed plumb and on solid bearing. Set box cover flush with finish grade. Locate nozzle toward pavement. Locate valve a minimum of 30" away from hydrant. Provide a drainage pit 24" deep filled with <sup>3</sup>/<sub>4</sub> inch washed gravel. Encase elbow of hydrant in gravel to 6" above drain opening. Do not connect drain opening to sewer.

Valve shall be installed plumb and on solid bearing. Set valve box cover flush with finish grade.

The hydrant and valve shall be tie rodded together with  $\frac{3}{4}$ " stainless steel rods and nuts.

### 760-3.5 IRON FITTINGS

The Contractor shall install ductile iron pipe fittings in accordance with the drawings, the requirements stated herein, and the applicable construction requirements of Division IV of the "Standard Specifications for Water and Sewer Construction in Illinois", as follows:

### **DIVISION IV WATER DISTRIBUTION**

Section 40 Pipe for Water Mains and Service Connections Section 41 Pipe Installation for Water Mains

All fittings which deflect the flow 11-1/4 degrees or greater shall have a thrust block. Thrust blocks shall be poured concrete of the dimensions shown on the drawings and in accordance with the provisions of the "Standard Specifications for Water and Sewer Construction in Illinois". Fittings shall be installed with "Megalug" brand retaining glands.

### METHOD OF MESUREMENT

### <u>760-4.1</u>

Flush-mounted hydrant will be measured per each installed, ready for use and accepted by the Engineer.

The fittings and bedding shall not be measured separately, but shall be considered incidental to the construction of the flush-mounted hydrant.

### BASIS OF PAYMENT

### <u>760-5.1</u>

Excavation, bedding, installation of ductile iron pipe, connections, compaction, pressure testing, chlorination shall be incidental to the flush-mounted fire hydrant.

Payment for iron fittings shall be considered incidental to the proposed flush-mounted hydrant installation. This item shall also include all work associated with construction of the thrust blocks and connections to existing watermain.

Select granular backfill will be incidental to this item. The bedding material shall be incidental to the hydrant installation.

Flush-mounted hydrant and shall be paid for on a per each basis installed as a complete operational unit including any granular backfill, rods, valves, restrained joints, thrust blocks, flat stone and concrete used to complete the item.

Payment will be made under:

# ITEM AR760801FIRE HYDRANT-FLUSH MOUNTED – PER EACH.ITEM AR760905REMOVE FIRE HYDRANT – PER EACH

# PART 11 - DRAINAGE

# ITEM 701 – PIPE FOR STORM DRAINS AND CULVERTS

### **DESCRIPTION**

### <u>701-1.1</u>

ADD:

Pipe shall be of the type and diameter indicated and installed at the locations shown on the plans. Pipe for storm sewers shall be gasketed concrete storm sewer pipe Class IV reinforced concrete conforming to ASTM C-76 (with joints meeting ASTM C-361) as called out in the plans.

### MATERIALS

#### 701-2.12 BACKFILL

REPLACE: Gradation of Backfill Table with the following:

Sieve Size	Gradation Percent Passing	
	CA 6	
1 1/2	100	
1	95±5	
1/2	75±15	
No. 4	43±13	
No. 16	25±15	
No. 200	8±4	

### **Gradation of Backfill**

### **CONSTRUCTION METHODS**

### 701-3.3 LAYING PIPE

ADD:

When sewer installation requires tapping into an existing manhole, the hole shall be cored to allow for appropriate pipe sizing. The work shall be considered incidental to the installation of the pipe.

### BASIS OF PAYMENT

### <u>701-5.1</u>

ADD:

Payment will be made under:

ITEM AR701512	12" RCP, CLASS IV – PER FOOT.
ITEM AR701515	15" RCP, CLASS IV – PER FOOT.
<b>ITEM AR701524</b>	24" RCP, CLASS IV – PER FOOT.
<b>ITEM AR701900</b>	REMOVE PIPE – PER FOOT.

# Additive Alternate No. 1:

ITEM AS701524 24" RCP, CLASS IV – PER FOOT.

# ITEM 705 – PIPE UNDERDRAINS FOR AIRPORTS

### MATERIALS

#### 705-2.1 GENERAL

DELETE: Paragraphs a, c and d.

#### 705-2.2 PIPE

DELETE: Paragraphs a, c and d.

ADD:

The 4" and 6" perforated HDPE pipe shall meet the requirements for Type 2 underdrain.

#### 705-2.5 BACKFILL

DELETE: This entire Section and REPLACE with:

Porous backfill shall be free of clay, humus, or other objectionable matter, and shall also conform to particle size specified.

Porous backfill material shall conform to the requirements for IDOT CA-7.

### CONSTRUCTION METHODS

### 705-3.2 EXCAVAZTION

Replace 4<sup>th</sup> paragraph with the following:

Excavated material not required or acceptable for backfill shall be disposed of by the Contractor off of Airport property or as directed by the Resident Engineer. No additional payment will be made for disposal of excess or unsuitable material. The excavation shall not be carried below the required depth; if this occurs, the trench shall be backfilled at the Contractor's expense with material approved by the Engineer and compacted to the density of the surrounding material.

#### 705-3.4 LAYING AND INSTALLING PIPE

ADD:

Trenches shall be lined with the underdrain trench envelope prior to placing any backfill or underdrain. A 2-foot minimum overlap of material is required where breaks in the fabric occur. The underdrain trench envelope shall be folded over the backfilled trench and weighted down with 1" to 2" of porous backfill.

### 705-3.7 BACKFILL

DELETE: Paragraphs b and c.

ADD:

Costs associated with backfilling and compaction of bedding and porous backfill shall be considered incidental to the cost of the underdrain.

# METHOD OF MEASUREMENT

### <u>705-4.1</u>

ADD:

The underdrain trench envelope, filter fabric, underdrain end caps, backfill and connections to new or existing drainage structures shall not be measured separately for payment but will be considered incidental to the proposed underdrain.

# BASIS OF PAYMENT

### <u>705-5.1</u>

Payment will be made under:

# ITEM AR705506 6" PERFORATED UNDERDRAIN – PER FOOT.

# Additive Alternate No. 1:

ITEM AS705504 4" PERFORATED UNDERDRAIN – PER FOOT.

# Additive Alternate No. 2:

ITEM AT705506 6" PERFORATED UNDERDRAIN – PER FOOT.

# ITEM 751 - MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES

### DESCRIPTION

### <u>751-1.1</u>

ADD:

These items of work shall also consist of construction of manhole-special as detailed in the plans. Manhole-special shall be in conformance with IDOT Standard 602401-07, with weep holes, precast reinforced concrete ring at the bottom of the structure and the elimination of base slab.

### MATERIALS

### 751-2.12 BACKFILL

REPLACE: Gradation of Backfill Table with the following:

Sieve Size	Gradation Percent Passing	
	CA 6	
1 1/2	100	
1	95±5	
1/2	75±15	
No. 4	43±13	
No. 16	25±15	
No. 200	8±4	

### **Gradation of Backfill**

# **CONSTRUCTION METHODS**

### 751-3.1 UNCLASSIFIED EXCAVATION

ADD:

The Contractor shall, at all times, provide and maintain in operation pumping and/or well point equipment for the complete dewatering of the excavation. No structure shall be permitted to be constructed in an excavated area in which any amount of water flows or is pooled.

ADD: New Section:

### 751-3.12 MANHOLE ADJUSTMENT

ADD:

Adjustment of exiting manholes shall be as detailed in the plans within new pavements. Any required adjustment rings shall be considered incidental to the manhole adjustment. Replacement of existing casting with new manhole casting shall be supplied by the Contractor and considered incidental to the manhole adjustment. New casting manhole cover shall be furnished with the word "SANITARY" and "VILLAGE OF WHEELING" cast in lid.

Contractor shall be responsible for field checking existing manhole configurations and sizes for the necessary adjustment.

# METHOD OF MEASUREMENT

<u>751-4.1</u>

ADD:

Manholes/inlets to be installed shall be measured per each, completed and accepted by the Resident Engineer and as shown on the plans and details.

All castings, frames, grates and fittings shall not be measured separately for payment but shall be incidental to corresponding drywell, manhole and inlet pay item.

# **BASIS OF PAYMENT**

# <u>751-5.1</u>

ADD:

The accepted number of manholes and inlets installed or adjusted will be paid for at the contract unit price per each, complete and in place. This price shall be full compensation for furnishing all materials and for all preparation, excavation, removal of existing structure, backfilling and placing of the materials; furnishing and installation of such specials and connections to pipes and other structures as may be required to complete the item as shown on the plans; and for all labor equipment, tools and incidentals necessary to complete the structure.

Payment will be made under:

ITEM AR751411	INLET-TYPE A – PER EACH.
ITEM AR751550	MANHOLE 5' – PER EACH.
ITEM AR751560	MANHOLE 6' – PER EACH.
ITEM AR751570	MANHOLE-SPECIAL – PER EACH.
ITEM AR751903	<b>REMOVE MANHOLE – PER EACH.</b>
<b>ITEM AR751943</b>	ADJUST MANHOLE – PER EACH.

# ITEM 752 – CONCRETE CULVERTS, HEADWALLS, AND MISCELLANEOUS DRAINAGE STRUCTURES

# **DESCRIPTION**

# <u>751-1.1</u>

ADD:

Flared end section shall be in conformance with IDOT Standard 542301-03. Underdrain headwall shall be in conformance with IDOT Standard 601101-02.

# **BASIS OF PAYMENT**

### <u>751-5.1</u>

ADD:

Payment will be made under:

# Additive Alternate No. 1:

ITEM AS705610CONCRETE HEADWALL FOR UNDERDRAIN – PER EACH.ITEM AS752424PRECAST REINFORCED CONC. FES 24" – PER EACH.

# ITEM 800164 – VOLUME CONTROL INSTALLATION

### DESCRIPTION

#### <u>800164-1.1</u>

The Contractor shall provide all labor, materials, tools, and equipment necessary to furnish, install and complete the following, as shown in the drawings, herein specified, or otherwise required.

Work includes construction of Volume Control Facility as shown in the plans and per the Metropolitan Water Reclamation District of Greater Chicago – Watershed Management Ordinance Technical Guidance Manual.

### MATERIALS

#### 800164-2.1

Permeable base course aggregate shall be open-graded, crushed, angular stone and shall conform per ASTM NO. 57 or Illinois Department of Transportation CA-1, CA-3 or CA-7. Choking stone layer shall be open graded, medium and conform to Illinois Department of Transportation Standard Specifications CA-16 or equivalent.

Fine aggregate base or sand filter shall be Illinois Department of Transportation Standard Specifications FA-2.

Geotextile fabric shall meet requirements of IUM material specification 592. Apparent opening size for woven shall be 0.50 mm (Table 1, Class I). Apparent opening size for non-woven shall be 0.30 mm (Table 2, Class II).

Observation well shall be 6" diameter PVC, Schedule 40 perforated pipe with removable watertight cap, non-perforated above base aggregate. The observation well cap shall be of brass material or approved equal.

Topsoil fill shall be incorporated into the locations as shown on the plans or as directed by the Resident Engineer and compacted in accordance with Item 152.

### **CONSTRUCTION METHODS**

### 800164-3.1 EXCAVATION

Excavation shall be in accordance with Item 152 Excavation and Embankment and as noted on the plans and details. The soils are suitable to be considered "Uncontaminated Soil" and are recommended as Clean Construction Demolition Debris.

### 800164-3.2 BASE COURSE AND FINE AGGREGATE

Base course and fine aggregate installation shall be in accordance with the IDOT Standard Specifications, Section 351 as herein modified.

### METHOD OF MEASUREMENT

### <u>800164-4.1</u>

Excavation, observation well, coarse aggregate, geotextile fabric, backfill and connections to new drainage structures and topsoiling shall not be measured separately for payment but will be considered incidental to the proposed volume control facility.

All excess material shall be hauled offsite at no additional cost to the contract.

Acceptance of the pay item occurs after construction of facility meeting the volume control requirements as specified on the plans.

### **BASIS OF PAYMENT**

#### <u>800164-5.1</u>

This price shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling and placing of the materials; installation of observation well, furnishing and installation of such specials and connections to pipes and other structures and topsoiling as may be required to complete the item as shown on the plans; and for all labor equipment, tools and incidentals necessary to complete the item.

Payment will be made under:

# ITEM AR800164 VOLUME CONTROL INSTALLATION – PER LUMP SUM.

### Additive Alternate No. 1:

ITEM AS800164 VOLUME CONTROL INSTALLATION – PER LUMP SUM.

# PART 12 – TURFING

# ITEM 901 – SEEDING

# **DESCRIPTION**

### <u>901-1.1</u>

ADD:

Topsoiling shall be per Item 905 Topsoiling and mulching shall be per Item 908 Mulching.

Restoration, seeding and mulching beyond the limits of seeding and mulching shown in the plans (such as lighting, cabling, signage, access roads, haul roads, staging area, storage area) shall be considered incidental to the contract.

### MATERIALS

### 901-2.2 LIME

DELETE: Entire Section.

### 901-2.3 FERTILIZER

ADD:

The Contractor has the option to perform a soil test, at their expense, to validate that the fertilizer rate specified is suitable for the on-site or plan specified topsoil sources. If the Contractor proposes an alternate mix ratio and weights, the proposal shall be approved by the Engineer. Alternate mix ratio and/or weights shall be at no additional costs to the contract.

# **CONSTRUCTION METHODS**

### 901-3.2 DRY APPLICATION METHOD

DELETE: Paragraph (c.) Seeding

ADD:

Grass seed shall be sown at the rate shown in 901-2.1 with a machine that is capable of cutting a slit in the soil free from leaves and debris, placing the seed in the slit and compacting the seed into the soil of the slit in one continuous operation.

The site will be to grade and shaped to the elevations as shown on the plans. The topsoil will be free of clods, stones, roots, sticks, rivulets, gullies, crusting, caking and have a soil particle size of no larger than 1". Seedbed preparation methods shall be approved by the Engineer. Cultivation shall be accomplished at such a time that seeding may occur immediately and without delay. No seeds shall be sown until the Seedbed has been approved by the Engineer.

No seed shall be sown during high winds or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and shows that the seed meets the noxious weed seed requirements. All equipment shall be approved by

the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified forty-eight (48) hours prior to beginning the seeding operations.

# 901-3.3 WET APPLICATION METHOD

DELETE: Entire Section.

### **BASIS OF PAYMENT**

# <u>901-5.1</u>

ADD:

Payment will be made under:

# ITEM AR901510 SEEDING – PER ACRE.

# Additive Alternate No. 1:

# ITEM AS901510 SEEDING – PER ACRE.

# ITEM 905 - TOPSOIL

# DESCRIPTION

### <u>905-1.1</u>

ADD:

Topsoil fill shall be incorporated into the existing turf shoulder at the locations shown on the plans or as directed by the Resident Engineer and compacted in accordance with Item 152.

Costs for testing of the proposed topsoil material to show compliance with Section 905-2.1 shall be borne by the Contractor.

# METHOD OF MEASURMENT

### <u>905-4.1</u>

DELETE: This entire section.

ADD:

Topsoil required for site restoration shall not be measured for payment.

### <u>905-4.2</u>

DELETE: This entire section.

# **BASIS OF PAYMENT**

### <u>905-5.1</u>

DELETE: This entire section.

### ADD:

Topsoil required shall not be paid for separately but shall be considered incidental to the costs for Item 152410 Unclassified Excavation.

# ITEM 908 – MULCHING

### <u>908-1.1</u>

ADD:

Restoration, seeding and mulching beyond the limits of seeding and mulching shown in the plans (such as for access roads, haul roads, staging areas, storage areas, etc.) shall be considered incidental to the contract.

### MATERIALS

### 908-2.1 MULCH MATERIAL

REVISE: First sentence to read:

Material used for mulching shall be (D) <u>Hydraulic Mulch – Heavy Duty</u>.

# METHOD OF MEASUREMENT

### <u>908-4.1</u>

DELETE: First paragraph and REPLACE with:

The quantity of mulching to be paid for shall be measured for payment by the number of acres of the actual surface covered with mulch, as specified, completed, and accepted by the Resident Engineer.

# **BASIS OF PAYMENT**

### <u>908-5.1</u>

ADD:

Payment will be made under:

# ITEM AR908515 HEAVY-DUTY HYDRAULIC MULCH – PER ACRE.

# Additive Alternate No. 1:

# ITEM AS908515 HEAVY-DUTY HYDRAULIC MULCH – PER ACRE.

# PART 13 – LIGHTING INSTALLATION

# ITEM 125 – INSTALLATION OF AIRPORT LIGHTING SYSTEMS

### **DESCRIPTION**

### <u>125-1.1</u>

ADD:

Airfield lighting improvements shall include:

- Removal of existing elevated retroreflective markers
- Installation of new elevated retroreflective markers.

### EQUIPMENT AND MATERIALS

### 125-2.7 RETROREFLECTIVE MARKERS

ADD

Elevated retroreflective markers shall be 24-inch tall, blue, soil anchored, and omnidirectional.

### **CONSTRUCTION METHODS**

ADD: New Section:

### 125-3.5 RETROREFLECTIVE MARKERS

Elevated Retroreflective Markers shall be omnidirectional, frangible markers of the color and mounting type as detailed on the plans. Shall be anchored per the manufacturer's recommendations.

### BASIS OF PAYMENT

### <u>125-5.1</u>

DELETE: Entire Section.

ADD:

Payment will be made at the contract unit price for each elevated retroreflective marker installed by the Contractor and accepted by the Engineer. This price shall be full compensation for furnishing all materials and for all preparation, removals, modifications, assembly, and installation of these materials, coordination with the manufacturers and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

# ITEM AR125100ELEVATED RETROREFLECTIVE MARKER – PER EACH.ITEM AR125912REMOVE RETROREFLECTIVE MARKER – PER EACH.

### Additive Alternate No. 1:

ITEM AS125100 ELEVATED RETROREFLECTIVE MARKER – PER EACH.

# **IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA**

# State of Illinois Department of Transportation Bureau of Materials and Physical Research

# POLICY MEMORANDUM

January 1, 2007	Springfield	07-21

TO: REGIONAL ENGINEERS, HIGHWAY BUREAU CHIEFS, AND MANUFACTURERS AND SUPPLIERS OF FINELY DIVIDED MINERALS

SUBJECT: ACCEPTANCE PROCEDURE FOR FINELY DIVIDED MINERALS USED IN PORTLAND CEMENT CONCRETE AND OTHER APPLICATIONS

# DEFINITIONS

**Department** - Illinois Department of Transportation.

<u>**Bureau**</u> - Bureau of Materials and Physical Research, at 126 East Ash Street, Springfield, Illinois 62704-4766.

**<u>Finely Divided Mineral</u>** - A finely divided material which has cementitious or pozzolanic properties. Examples are fly ash, microsilica (silica fume), ground granulated blast-furnace (GGBF) slag, and high-reactivity metakaolin (HRM).

<u>Manufacturer</u> - A company that manufactures a finely divided mineral. The term Producer is also used.

**Supplier** - A company that supplies a finely divided mineral which it does not manufacture.

**<u>Source</u>** - The name and location of the manufacturing process from which the finely divided mineral is obtained.

<u>Approved Source</u> - A source that is approved by the Bureau to ship a finely divided mineral for immediate use on Department projects.

<u>Unapproved Source</u> - A source that ships a finely divided mineral which must be sampled, tested, and approved by the Bureau before it is used on Department projects.

<u>**Cement**</u> - Portland cement.

**<u>Fly Ash</u>** - A finely divided residue that results from the combustion of ground or powdered coal, transported from the combustion chamber by exhaust gas, collected by mechanical or electrical means, and stored in stockpiles or bins.

<u>Microsilica</u> - An amorphous silica of high silica content and purity possessing high pozzolanic activity.

**<u>Ground Granulated Blast-Furnace (GGBF) Slag</u>** - A glassy granular material, formed when molten blast-furnace slag is rapidly chilled, and then finely ground.

<u>**High-Reactivity Metakaolin (HRM)</u>** - A reactive aluminosilicate pozzolan formed by calcining purified kaolinite at a specific temperature range.</u>

**<u>Reference Material</u>** - A portland cement used for the control mortar and corresponding test mortars, of a finely divided mineral, to determine its strength activity index.

**<u>Preliminary (PRE) Sample</u>** - A sample used to determine, in advance, if the finely divided mineral will comply with Department specifications.

**<u>Process Control (PRO) Sample</u>** - A sample used for the purpose of controlling production of finely divided minerals proposed for incorporation into Department projects.

<u>Acceptance (ACC) Sample</u> - A sample used for accepting/rejecting finely divided minerals prior to its use on Department projects and/or unassigned stock for future use on projects. The quantity represented by acceptance samples must be given.

**Independent Assurance (IND) Sample** - A sample used to provide an independent check on the reliability of the manufacturer's quality control program.

**Investigation (INV) Sample** - A destination sample used to verify the acceptability of a finely divided mineral from a source.

<u>**Grab Sample</u>** - A sample secured from a conveyor, from bulk storage, or from a bulk shipment in one operation.</u>

<u>**Composite Sample**</u> - Combined grab samples taken at prescribed intervals over a period of time.

**<u>NIST</u>** - National Institute of Standards and Technology.

**<u>CCRL</u>** - Cement and Concrete Reference Laboratory.

**ISO 9000 Series** - A program of international quality management system standards developed by the International Organization for Standardization (ISO).

# 1.0 PURPOSE

To establish procedures whereby materials of mineral origin, furnished by a **Manufacturer** or **Supplier**, will be accepted for use on **Department** projects.

# 2.0 SCOPE

This procedure is available to all **Manufacturers** or **Suppliers** of domestic and foreign **Finely Divided Minerals**. **Sources** in North America may be **Approved** or **Unapproved**. **Sources** located outside of North American will not be given **Approved Source** status, and the procedures in Sections 5.1 and 5.3 shall apply.

# 3.0 SPECIFICATION REQUIREMENTS, SAMPLING, AND TEST PROCEDURES

3.1 **Finely Divided Minerals** used on **Department** projects shall meet the material requirements of the **Department's** "Standard Specifications for Road and Bridge Construction (January 1, 2007)" and current special provisions.

# 4.0 APPROVED SOURCE PROCEDURE

- 4.1 A **Manufacturer** or **Supplier** requesting **Source** approval of a **Finely Divided Mineral** shall provide the following to the **Bureau**:
  - (1) The **Manufacturer**'s or **Supplier**'s name and location.
  - (2) The **Source** name, location (station), and number of generating units.
  - (3) The name of the Finely Divided Mineral and its class or grade.
  - (4) A certification that the **Finely Divided Mineral** meets the applicable requirements of Section 3.0.
  - (5) A 6-month testing history.
  - (6) A copy of the Manufacturer's or Supplier's quality control program.
  - (7) A copy of the last CCRL inspection report of the testing laboratory used by the Manufacturer or Supplier of the Finely Divided Mineral, with documentation of resolution of any discrepancies noted therein. The Manufacturer or Supplier of HRM or Microsilica shall provide a copy of the testing laboratory's CCRL inspection report and/or an ISO 9000 Series certificate.
  - (8) A copy of the Material Safety Data Sheet (MSDS) for the **Finely Divided Mineral**.

At the time of application, the Manufacturer or Supplier shall obtain a Preliminary (PRE) Grab Sample of the Finely Divided Mineral from current production. The Manufacturer or Supplier shall split the PRE Sample and place one portion in an airtight container and deliver it to the Bureau. A sample of the Reference Material used by the Manufacturer or Supplier for testing shall be included. The Manufacturer or Supplier shall assume the cost to deliver the samples to the Bureau. The size of the Bureau's portion of the PRE Sample, and the Reference Material, shall not be less than 3 kg (6 lb.) each and the samples shall be properly identified as required in Attachment 1. The Manufacturer or Supplier shall test the retained portion of the PRE Sample for the standard physical and chemical properties listed in the applicable specification in Section 3.0 and deliver a copy of the test results to the Bureau for comparison.

The **Bureau** will test its portion of the **PRE Grab Sample** for conformance to Section 3.0. The **Bureau** will compare the results obtained by both laboratories to determine compliance with the allowable difference between two laboratories set forth in the precision statement of each test method. Additional split sample testing will be required if the test results obtained on the **PRE Grab Sample** do not comply with the specification requirements of this policy memorandum.

An inspector from the **Bureau** may conduct a scheduled visit to inspect the laboratory facilities designated by the **Manufacturer** or **Supplier** to test the **Finely Divided Mineral**; the **Source** manufacturing process, the **Source** storage facilities; and the quality control policies, procedures, and practices used by the **Manufacturer** or **Supplier**. The **Manufacturer** of **Supplier** shall be responsible for payment of transportation, per diem (meals), lodging, and incidental travel costs incurred by the **Department**.

The **Bureau** will notify the **Manufacturer** or **Supplier**, in writing, if the request for **Approved Source** status is granted or denied. A request may be denied if the **Manufacturer** or **Supplier** fails to meet the requirements of this policy memorandum, or for other reasons determined by the **Department**.

4.2 Quality Control Requirements for **Approved Sources**:

The **Manufacturer** or **Supplier** shall establish and maintain quality control policies and procedures for sampling and testing that are approved by the **Bureau**. The **Bureau** shall be notified of any changes in the **Manufacturer's** or **Supplier**'s quality control program.

Testing laboratories used by the **Manufacturers** or **Suppliers** of **Fly Ash** or **GGBF Slag** shall participate in the CCRL pozzolan program of the NIST, which includes inspection of facilities and testing of comparative samples. As an alternative to the **CCRL** pozzolan program of the **NIST**, **Manufacturers** or **Suppliers** of **GGBF Slag** may participate in the CCRL cement program. Testing laboratories used by the **Manufacturers** or **Suppliers** of **Microsilica** or **HRM** shall participate in the **CCRL** pozzolan program of the **NIST** and/or shall have implemented a quality management system based on the **ISO 9000 Series** standards.

4.3 Reporting Requirements for **Approved Sources**:

The **Manufacturer** or **Supplier** shall deliver a test report to the **Bureau** which lists the results of all **Grab** and/or **Composite Samples** taken and tested for the specified reporting period.

For **Fly Ash**, the report shall be monthly, and shall be delivered no later than forty calendar days after the end of the month. If the **Fly Ash Source** is sampling more frequently than once per month according to ASTM C 311, then the report shall be delivered no later than forty calendar days after the end of the composite date. If the deadline falls on a Saturday, Sunday, or State Holiday, the deadline shall be the next work day.

For **GGBF Slag**, **HRM**, and **Microsilica**, the report shall be quarterly and shall be delivered no later than forty calendar days after the end of each quarter. For the purpose of the reports, the quarters shall end March 30, June 30, September 30, and December 31. If the deadline falls on a Saturday, Sunday, or State Holiday, the deadline shall be the next work day.

Sampling, testing, and reporting shall be done according to the applicable specification in Section 3.0.

4.4 Record Requirements for **Approved Sources**:

Records of production control tests shall be maintained by the **Manufacturer** or **Supplier** for a minimum period of 5 years, and shall be made available to the **Bureau** upon request.

Copies of bills of lading of quantities of **Finely Divided Minerals** shipped shall be maintained by the **Manufacturer** or **Supplier** for a minimum period of 3 years, and shall be made available to the **Bureau** upon request.

# 4.5 Sampling and Test Requirements for **Approved Sources**:

For **Fly Ash**, each February, May, August, and November, the **Supplier** shall obtain a **Process Control (PRO) Grab Sample**.

For **GGBF Slag, HRM, and Microsilica**, each January, April, July, and October, the **Manufacturer** or **Supplier** shall obtain a **PRO Grab Sample**.

The **PRO Grab Sample** shall be split for testing by the **Manufacturer** or **Supplier** and the **Bureau**. At this time, a sample of the current **Reference Material** used by the **Manufacturer** or **Supplier** for testing shall also be split.

The **Bureau** may require that more frequent **PRO Grab Samples** be obtained and tested. Increasing the sampling frequency may be required due to significant changes in the material or process, variations in test results between the **Bureau** and **Manufacturer** or **Supplier**, field test results, or other reasons as determined by the **Bureau**. The **Bureau** samples shall be placed in airtight containers, properly identified on form BMPR CM01 (www.dot.il.gov/materials/materialforms.html), and delivered to the **Bureau** no later than the last work day of the month. Each **Finely Divided Mineral** sample and **Reference Material** sample shall not be less than 3 kg (6 lb).

The **Manufacturer** or **Supplier** shall test the retained portion of each **PRO Sample**, using the retained portion of the **Reference Material**, for the standard physical and chemical properties listed in the applicable specification in Section 3.0. When all tests are completed, the **Manufacturer** or **Supplier** shall record the test results on a report form that identifies the sample as a **PRO Sample**, and deliver the report to the **Bureau** no later than the last work day of the following month from the date of sample.

The test results obtained by the **Manufacturer** or **Supplier** and the **Bureau** on all split samples will be compared for compliance with the allowable differences for two laboratories set forth in the precision statement of each test method and for compliance with Section 3.0. If significant differences exist in the split sample test results, the **Department** will investigate sampling and test procedures, or require additional comparative sampling to determine the cause of the variation.

# 4.6 **Department** Inspections of **Approved Sources**:

An inspector from the **Bureau** may conduct unscheduled visits, at **Department** expense, to each **Approved Source** or one of its terminals. During this visit, the inspector will either take or witness the taking of a random **Independent Assurance (IND) Grab Sample**. The inspector will split the sample and deliver an equal portion to the **Manufacturer** or **Supplier**. The **Manufacturer** or **Supplier** shall test the retained portion of the split sample for the standard physical and chemical properties

listed in the applicable specification and deliver the test results to the **Bureau**, as specified in Section 4.5, for comparison and compliance with Section 3.0.

Random Investigation (INV) Samples of the Finely Divided Minerals and the project Cement will be obtained at final destination by a representative of the **Department**. The representative will either take or witness the taking of the INV

**Samples**. **INV Samples** will be **Grab Samples** and shall not be less than 3 kg (6 lb). (Note: **Cement** samples will be taken according to ASTM C 183). The

sampling location and frequency for obtaining **INV Samples** will be determined by the **Bureau** in consultation with the district offices.

The **Bureau** will test **INV Samples** to ascertain the results of **Finely Divided Mineral**-project **Cement** combinations. To verify that **Finely Divided Minerals** shipped from **Approved Sources** meet the requirements of Section 3.0, the **Bureau** will test **INV Samples** with the appropriate **Reference Material**.

4.7 Revocation of **Approved Source** Status:

Failure of a **Manufacturer** or **Supplier** to meet the requirements of Sections 3.0 and 4.0 of this policy memorandum will be sufficient cause to revoke **Approved Source** status. However, a total of three late submittals in a twelve month period for any of the following: test report (**Grab** or **Composite Samples**), **PRO Sample**, or **PRO** test results will be permitted. Revocation will occur if a fourth late submittal occurs in a twelve month period. The **Manufacturer** will be notified in writing when the third late submittal in a twelve month period occurs.

Failure to resolve significant differences in testing, as indicated by the test results obtained on **PRO** or **IND Samples** split with the **Manufacturer** or **Supplier** will be sufficient cause to revoke **Approved Source** status.

Failure of the testing laboratory, used by the **Manufacturer** or **Supplier** of a **Finely Divided Mineral**, to satisfactorily resolve the discrepancies noted in the CCRL inspection report and/or to maintain a quality management system based on the **ISO 9000 Series** will be sufficient cause to revoke **Approved Source** status.

Revocation of **Approved Source** status will be reported to the **Manufacturer** or **Supplier** in writing. The **Manufacturer** or **Supplier** may not re-apply for **Approved Source** status until 30 days have elapsed from the date of the written notice of revocation.

# 5.0 UNAPPROVED SOURCE PROCEDURE

- 5.1 A **Manufacturer** or **Supplier** requesting approval of a **Finely Divided Mineral** from an **Unapproved Source** shall provide the following to the **Bureau**:
  - (1) The Manufacturer's or Supplier's name and location.
  - (2) The **Source** name, location (station), and number of generating units.
  - (3) The name of the **Finely Divided Mineral** and its class or grade.

- (4) A current test report, in English, which indicates the standard physical and chemical composition of the **Finely Divided Mineral** as per Section 3.0.
- (5) The transportation method and location at which an inspector from the **Bureau** will be able to obtain **Acceptance (ACC) Samples**.
- (6) If requested by the Bureau, the Manufacturer or Supplier shall deliver to the Bureau a 24-hr Composite Preliminary (PRE) Sample of the Finely Divided Mineral from current shipments. The Manufacturer or Supplier shall assume the cost to deliver it to the Bureau. The size of the PRE Sample shall not be less than 3 kg (6 lb) and the sample shall be properly identified as required in Attachment 1.
- 5.2 Sampling and Test Requirements for **Unapproved Sources** in North America:
  - (1) **Finely Divided Minerals** from an **Unapproved Source** will be sampled, tested, and approved by the **Bureau** before use on **Department** projects. The **Bureau** has the option to affix a seal to secure **Finely Divided Minerals** in storage (e.g. silo, truck, railroad car, or barge) until the **Bureau's** testing is completed.
  - (2) Upon arrival of the Finely Divided Mineral to Illinois, an inspector from the Bureau will obtain Acceptance (ACC) Grab Samples according to the applicable specifications. The Bureau will determine the number of representative samples required.
  - (3) The Manufacturer or Supplier may request the Bureau to sample the Finely Divided Mineral prior to arrival in Illinois. In the event the request is approved, the Manufacturer or Supplier shall be responsible for payment of transportation, per diem (meals), lodging, and incidental travel costs incurred by the Department inspector. If the Department determines that it lacks the resources to accomplish out-of-state inspection, the Finely Divided Mineral may be sampled and tested according to the procedures in Section 5.3.
  - (4) Acceptance (ACC) Samples will be tested by the Bureau for conformance to Section 3.0, and to approve the Finely Divided Mineral for use on Department projects.
  - (5) Random Investigation (INV) Samples of Finely Divided Minerals may be obtained at final destination by a representative of the Department. The representative will either take or witness the taking of the INV Samples. INV Samples will be Grab Samples and will be taken according to the applicable specification. The sampling location and frequency for obtaining INV Samples will be determined by the Bureau in consultation with the district offices. The Bureau will use INV Samples to verify that the Finely Divided Mineral shipped meets the requirements of Section 3.0.
- 5.3 Sampling and Test Requirements for **Unapproved Sources** Located Outside North America:

An agent of the importer shall obtain an **Independent Assurance (IND) Grab Sample** from each barge of foreign **Finely Divided Mineral** loaded at the port of entry and destined for Illinois.

The agent shall split each barge **Grab Sample** and mail one portion to the **Bureau**. The other portion shall be mailed to the importer's testing laboratory that is approved by the **Department**. The importer of the **Finely Divided Mineral** shall be responsible for all sampling and mailing costs.

The importer's laboratory shall test its portion of each barge **Grab Sample** for the standard physical requirements of the applicable specifications. One random barge **Grab Sample**, representing the **Finely Divided Mineral** in each hold of the vessel shall be tested for chemical composition.

Upon completion of the tests, the importer shall deliver to the **Bureau** a certification that states the **Finely Divided Mineral** in the vessel unloaded at the port of entry has been tested by the importer, and complies with the applicable specifications. Attached to the certification shall be a test report of all barge samples. The report shall include the name of the vessel, the source of the **Finely Divided Mineral**, the barge number, the hold number, the date the sample was taken, the quantity of **Finely Divided Mineral** in the barge, and the physical and chemical test results obtained on the samples.

The importer shall immediately notify the **Bureau** if a barge sample fails to meet the applicable specification requirements.

The **Bureau** will review the certification and compare the importer's test data to the test data obtained by the **Bureau** on its portion of each split sample.

When the certification and the accompanying test report are examined and determined to be correct, the **Bureau** will notify the importer and the district offices that the **Finely Divided Mineral** is approved for state projects.

**Random Investigation (INV) Samples**, from one or more barges, may be taken by a **Department** inspector when the barges arrive at the Illinois terminal(s).

The **Department** will reject any foreign **Finely Divided Mineral** tested by the **Bureau**, or the importer, that does not meet the specification requirements. The **Department** may reject any barge of **Finely Divided Mineral** wherein the differences in test values, obtained by the **Department** and the importer on the split sample, exceeds the multilaboratory precision of the test method, but the **Finely Divided Mineral** is within specifications.

Alternative proposals to the sampling and test requirements stated in this section will be considered for **Finely Divided Minerals** which have an acceptable quality history, and which have previously been approved by the **Department**. Requests shall be directed to the **Bureau of Materials and Physical Research** for approval.

### 6.0 ACCEPTANCE OF FINELY DIVIDED MINERALS
- 6.1 **Finely Divided Minerals** will be accepted according to the **Department's** current "Standard Specifications for Road and Bridge Construction," current special provisions, and this policy memorandum.
- 6.2 The Bureau will maintain and circulate a current list of Approved Sources of Finely Divided Minerals which meet the requirements of this policy memorandum. This list will include the name, location, and Producer/Supplier Number of each approved Manufacturer or Supplier of Finely Divided Minerals. These Manufacturers or Suppliers may ship Finely Divided Minerals for immediate use on Department projects.
- 6.3 **Finely Divided Minerals** from **Unapproved Sources** will be approved by the **Bureau** before use on **Department** projects.

#### 7.0 REJECTION OF FINELY DIVIDED MINERALS

- 7.1 A **Finely Divided Mineral** that fails to conform to the requirements of Section 3.0 of this policy memorandum shall be rejected for use on **Department** projects.
- 7.2 The **Bureau** will notify the **Manufacturer** or **Supplier** when a **Finely Divided Mineral** is rejected for use on **Department** projects.

Dail I. Lyput

David L. Lippert, P.E. Acting Engineer of Materials and Physical Research

Attachment

This policy memorandum supersedes Policy Memorandum 06-03 dated January 1, 2006.

DAD/dt

Attachment 1 - Page 1





State of Illinois Department of Transportation Office of Intermodal Project Implementation Aeronautics

#### POLICY MEMORANDUM

February 10, 2022	Springfield, Illinois	Number 22-1

#### TO: CONSULTING ENGINEERS / CONTRACTORS

SUBJECT: ACCEPTED CEMENT TYPES

- I. This policy memorandum addresses the accepted cement types for use in Items 501 and 610 Concrete mixtures. Type IL cement has been added to the approved list and may be used on all IDOT-Let Aeronautics projects.
- II. The following cement types are approved.
  - a. Type I cement conforming to the requirements of ASTM C 150.
  - b. Type IL cement conforming to the requirements of ASTM C 595.
  - c. All other types are not allowed unless specified by Special Provisions.

William C. Eves, P.E. Acting Chief Engineer

#### State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

February 20, 2014

Springfield

Number: 87-2

#### TO: CONSULTING ENGINEERS

#### SUBJECT: DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS

#### I. Introduction

This Policy Memorandum deals with the implementation of the bituminous density quality assurance specifications as outlined in the Standard Specifications for Construction of Airports, Sections 401-4.15 and 403-4.15.

#### II. Sampling

After completion of compaction and when the pavement has reached ambient temperature, the paved area shall be divided into Sublots of 500 tons per type of mix. One core sample (2 cores per sample) shall be taken from each Sublot. The longitudinal and transverse location for each sample shall be determined by use of a random number "Deck" provided by the Division. No core shall be taken closer than two (2) feet from the edge of the mat. A core extraction device shall be used to obtain all cores from the mat. All cores are to be taken by the contractor under the supervision and remain in the possession of the Engineer. It is imperative that the Engineer and the contractor realize that the cores are "money" and that improper coring, extraction, shipping and/or testing can be costly.

One mix sample per 1000 tons of mix laid shall be taken for Extraction, Maximum Specific Gravity ( $G_{mm}$ ) and Air Void tests. The mix samples shall be sampled by the contractor and split in half.

The Resident Engineer shall randomly designate and send the split samples to an independent laboratory for testing. The laboratory will be verified to be ASTM- certified for all the required testing and be contracted through the Consultant. The frequency of testing split samples shall be 1 per 5000 tons. Higher frequencies may be necessary if the contractor's tests, and/or mix quality control are inconsistent.

#### III. Testing

All cores shall be tested for Bulk Specific Gravity ( $G_{mb}$ ) in accordance with ASTM D2726 using Procedure 10.1, "For Specimens That Contain Moisture." The Theoretical Maximum Gravity ( $G_{mm}$ ) shall be determined according to ASTM D2041. From these tests the in-place air voids of the compacted pavement are calculated according to ASTM

D3203 for "dense bituminous paving mixtures." Selection of the proper  $G_{mm}$  shall be based on a running average of four (4) tests per Lot.

- E.g. Lot 1 Use the average of the two (2) tests for Lot 1.
  Lot 2 Use the average of the four (4) tests from Lots 1 and 2.
  Lot 3 Use the average of the four (4) tests from Lots 2 and 3.
  - NOTE: When more than four (4) Sublots are used, still use a running average of four (4) tests per Lot.

#### IV. Acceptance Calculations

The first step in calculating the quantities for pay is to calculate the Mean (X) and the Standard Deviation (S) of the Sublot tests. From this data the Lot samples should first be tested for outliers. After consideration for outliers, the Percent Within Tolerance (PWT) and the Percent Within Limits (PWL) are calculated to determine the final pay quantities for the Lot.

#### EXAMPLE

1. Test Data

Lot Quantity = 2000 tons			
Sublot Test 1 = 4.35 % Air Voids			
Sublot Test 2 = 3.96 % Air Voids			
Sublot Test 3 = 6.75 % Air Voids			
Sublot Test 4 = 6.25 % Air Voids			

2. Calculating the Mean and Standard Deviation

Sublot	<u>X</u>	$(X - \overline{X})$	$(\underline{X - X})^2$
1	4.35	-0.978	0.956
2	3.96	-1.368	1.871
3	6.75	1.422	2.022
4	<u>6.25</u>	0.922	<u>0.850</u>
Sum =	21.31		5.699

N = 4

Mean  $\overline{(X)} = 21.34 / 4 = 5.328$ 

Variance  $(S)^2 = Sum (X - \overline{X})^2 = \frac{5.699}{3} = 1.900$ 

Standard Deviation S =  $\sqrt{1.900}$  = 1.378

3. Test for Outliers

Check for Critical "T" Values

$$T = \left| \frac{X_1 - X}{S} \right|^* = \frac{3.96 - 5.328}{1.378} = 0.99$$

\* Difference between the suspect test value ( $X_1$ ) and the Mean ( $\overline{X}$ ).

If the T value exceeds the critical "T" Value in the table below and no <u>assignable</u> <u>cause</u> can be determined for the outlier, discard the suspected test measurement and obtain another random sample from the Sublot in question. If the new test exceeds the Mean (X) in the same direction from the Mean as the suspected test, recalculate the T value including all tests (original test, suspected test, and new test) for an outlier and for computing final payment.

#### TABLE OF CRITICAL "T" VALUES

Number of observations	Critical "T" Value
<u>(N)</u>	5% Significance Level
3	1.15
4	1.46
5	1.67
6	1.82
7	1.94
8	2.03
9	2.11
10	2.18
11	2.23
12	2.29

Based on the above table, the "T" value of 0.99 does not exceed the Critical "T" Value of 1.46 for N = 4. Therefore, the value (3.96) is not an outlier and shall be used in calculating the Lot payment.

4. Calculation of Lot Payment

To calculate the Lot Payment use the Acceptance Criteria as outlined under Item 401-4.15(c) or Item 403-4.15(c).

$$Q_L = (X - 1) = \frac{5.328 - 1}{1.378} = 3.141$$

$$\frac{Q_{\underline{u}}}{S} = \frac{(7 - \overline{X})}{S} = \frac{7 - 5.328}{1.378} = 1.213$$

From this data the Percentage Within Tolerance (PWT) for both the lower and upper tolerance limits is determined by Table 6 (see Item 401 Bituminous Surface Course and/or Item 403 Bituminous Base Course in the Standard Specifications) for the number (N) of samples tested.

Eq. PWT (lower) = 99.0% PWT (upper) = 90.4%

We now calculate the Percent Within Limits (PWL) for the Lot.

PWL = [PWT (lower)] + [PWT (upper)] - 100 PWL = (99.0 + 90.4) - 100 = 89.4% Using Table 5, the % Adjustment in Lot Quantity is:

% Adjustment = 0.5 PWL + 55.0 % Adjustment = 0.5 (89.4) + 55.0 % Adjustment = 99.7

Adjusted Quantities = % Adjustment x Lot Quantities Adjusted Quantities = 0.997 x 2000 tons Adjusted Quantities = 1994 tons

5. Resampling and Retesting

The contractor has the right to request the resampling and retesting of a complete Lot. This privilege is only allowed once for each Lot and must be requested in writing by the contractor within 48 hours of receiving the official report from the Engineer.

6. Reporting

After completion of the tests for each Lot, the Engineer shall complete the necessary calculations for final adjustment in quantities on the Form AER-1 and have both the Engineer and the Contractor sign the report for copying to both the FAA and IDOA.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 87-2, dated April 1, 2010

#### State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

December 3, 2020

Springfield

Number: 87-3

#### TO: CONSULTING ENGINEERS & CONTRACTORS

# SUBJECT: MIX DESIGN, TEST BATCH, QUALITY CONTROL, AND ACCEPTANCE TESTING OF PCC PAVEMENT MIXTURE

#### I. <u>SCOPE</u>

This Policy Memorandum addresses the Mix Design, Test Batch, Quality Control and Acceptance Testing of PCC pavement mixtures specified by Item 501, Portland Cement Concrete Pavement, in accordance with the Standard Specifications for Construction of Airports, Special Provisions, and policies of the Division of Aeronautics.

#### II. MIX DESIGN

Prior to the start of paving operations and after approval by the Division of Aeronautics (IDA) of all materials to be used in the manufacture of the concrete, the contractor shall provide a preliminary mix design(s) for evaluation at the Test Batch. The mix design shall indicate saturated surface dry batch weights per cubic yard for each material component. In addition, each material component, including chemical admixtures, shall be identified by the IDOT material code number, the IDOT producer code number, and the producer name and location. Saturated surface dry and oven dry specific gravities, as well as absorption values, for each proposed aggregate to be used in the mix shall be indicated on the mix design.

The Mix Design and the contractor's approved Job Mix Formula (JMF) will be issued by our office subject to verification of the mix by strength tests obtained from mix prepared from a Test Batch(es) according to the approved JMF. The water-cementitious ratio established from the approved test batch is the maximum water-cementitious ratio allowed during production paving.

#### III. TEST BATCH

At least 28 days prior to the start of production, the contractor and/or producer shall prepare a Test Batch under the direction of the Engineer. The Test Batch shall be prepared at the concrete plant proposed for use in the production of the concrete mix for

the project and shall be in accordance with the approved Job Mix Formula (JMF). When approved by the Engineer, the Test Batch may be prepared at a different plant provided that the same materials specified in the JMF are used. The plant shall have been surveyed and approved by the Engineer prior to preparation of the Test Batch. As required by these Special Provisions, the contractor shall provide Quality Control for production of the concrete. The contractor shall have his Quality Control Manager and a representative of the contractor familiar with the paving operation, present at the Test Batch preparation. The Test Batch shall be prepared as follows:

#### A. <u>Proportioning</u>

Prior to preparation of the mix, the Proportioning Technician shall perform a minimum of two (2) gradation analysis and two (2) moisture tests on each aggregate used. The gradation analysis shall be reported on form AER-12. From this data, the JMF shall be adjusted for moisture, in accordance with form AER-12. A microwave type moisture probe (or equal) may be allowed to adjust proportions for sand moisture when approved by the Engineer.

#### B. <u>Preparation of the Mix:</u>

- 1.) Prepare a Test Batch that is at least one-half (1/2) the manufacturer's rated capacity of the mixing drum (in cubic yards). The Test Batch shall be prepared with the approved JMF, adjusted for moisture.
- 2.) Mixing requirements shall be:
  - a.) <u>Central Mix Plant</u>: Mixing time shall be a minimum of 90 seconds. If transit mixer trucks are used to transport the mix, the mix shall be agitated, after mixing, at 2-5 RPM for the approximate time anticipated between batching at the plant and deposit of the concrete in the forms. If non-mixing trucks are used to transport the mix, the mix shall remain in the central mixer with no mixing or agitation for the approximate time anticipated from when the water contacts the cement and deposit of the concrete in the forms.
  - b.) <u>Transit Mix Plant</u>: Allowed for projects ≤5000 CY. Mixing shall consist of 70-100 Revolutions @ 5-16 RPM. After initial mixing, agitate mix at 2-5 RPM for the approximate time anticipated between batching at the plant and deposit of the concrete in the forms.
- 3.) <u>Slump and Air</u>: If the air content after aging is 6.0% ±1.5% and provides the required workability for paving, the contractor will make cylinders and/or beams for testing at 3, 7, 14 and 28 days. If the slump is below that required for placement, the contractor may add additional water to increase the slump as necessary up to the maximum water/cement ratio (or water/cementitous material) ratio listed herein. Additional mixing of at least 40 Revolutions will be required with each addition of water. Cylinders and/or beams will be made for testing at 3, 7, 14 and 28 days when the slump is obtained, at 6.0% ±1.5% air content. The water/cement ratio (or water/cementitious material) ratio shall be according to the Standard Specifications, Section 501-4.1, b, (3).

- 4.) The Proportioning Technician shall complete Form AER-15, PCC Testing Summary and Form AER-6, Concrete Moisture Determination (Adjusted Oven Dry Method), to be given to the Resident Engineer after completion of the Test Batch. The Flask Method, Dunagan Method, and Pycnometer Jar Method (Form AER 19) are also acceptable test methods for the determination of aggregate moisture.
- 5.) The Resident Engineer and contractor shall each independently complete Form AER-4, Concrete Plant Production, Mix Verification.
- 6.) The concrete test cylinders and/or beams shall be tested at 3, 7, 14 and 28 days to establish a growth curve of concrete strength vs. age. The compressive strength shall be at least 400 psi, over the specified strength, at 28 days. Flexural strength concrete shall have at least 100 psi over the specified strength at 28 days.

#### IV. QUALITY CONTROL

Quality control testing is the responsibility of the contractor and must be performed by qualified testing personnel approved by the Engineer. The proportioning technician shall be PCC Level II certified and must perform his or her duties on a full-time basis whenever concrete is produced for an IDA project.

If a QC or QA test for slump, air content, or mix temperature meets or exceeds the Suspension Limits of the Standard Specifications, section 501-5.4, Control Chart Limits the contractor shall reject the batch. In the case of a failing test, the contractor shall take corrective action according to the Standard Specifications, section 501-5.5. Adjustments are subject to the time limitations of 1 hour from time of batching when the concrete is transported in mixer trucks. Time limitations shall be increased by 30 minutes when the concrete mixture contains a retarding admixture. When concrete has been rejected due to failing test results, the contractor shall continue to run tests for the failed test parameter until at least 3 consecutive passing tests are achieved. This testing is in addition to the normal QC and QA testing.

- A. Duties of the Proportioning Technician:
  - 1.) Check and maintain shipment tickets of <u>each material</u> used in the manufacture of the concrete. These tickets are to be given to the Resident Engineer for each day's production of concrete. The aggregates shall indicate the quality on the ticket and a statement that the coarse aggregate is a non "D" cracking (freeze-thaw rated by IDOT) aggregate. In lieu of having these statements on each ticket, the contractor may use Form AER-18, Aggregate Certification of Compliance.

- 2.) Inspect and maintain proper storage of all aggregates and materials daily.
- 3.) Perform at least two (2) sieve analysis for each aggregate daily.
- 4.) Inspect all weighing or measuring devices daily.
- 5.) Twice daily check the actual weighing or measuring of aggregates, cement, water, and admixtures for conformance to adjusted batch proportions. Record data on Form AER-4, Concrete Plant Production, Mix Verification, and calculate the water/cement (or water/cementitious material) ratio.
- 6.) See that the volume of the batch does not exceed the allowable capacity of the mixer and that the proper mixing time is used.
- 7.) Make at least two (2) moisture tests of each aggregate daily and correct batch weights as required.
- 8.) Adjust the dosage rates of the admixtures as required to meet concrete temperature changes and paving conditions.
- 9.) Complete AER-15, PCC Testing Summary, and Form AER-4, Concrete Plant Production, Mix Verification for each day's production and deliver same to the Resident Engineer at the <u>end of the day</u> for which the data pertains. Provide to the Resident Engineer load tickets for all aggregates, cement, and admixtures used in the mix.

The Resident Engineer will also be required to complete Form AER-4, Concrete Plant Production, Mix Verification. Forms AER-4, AER-12, and AER-15 shall be submitted to the R.E. on a <u>daily</u> basis.

#### V. <u>ACCEPTANCE TESTING</u>

Acceptance testing shall be according to the Standard Specifications, section 501-6.1-6.6.

As required by Item 501-6.3 of the Standard Specifications, acceptance and payment of the final pavement is based on the strength of either cylinders or beams taken at random during the time of construction. The pavement shall be divided into Lots of 1200 cubic yards with sublots of 300 cubic yards each. The final sublot of the project shall be separated into an additional sublot if the concrete quantity is greater than or equal to 150.0 cubic yards. Otherwise, this remaining quantity shall be incorporated into the previous sublot.

Lots and sublots shall not be separated by mix design or day of paving if the project is using more than one mix design. The grouping of Lots and sublots is to be done solely by the quantity of cubic yards poured on the project.

One random sample (two cylinders or two beams) shall be obtained from each sublot for testing at 28 days to calculate final payment. At the time a sublot sample is taken, one (1) slump, one (1) air test and one (1) temperature check shall be taken.

The above-mentioned tests including Test Batch results will be reported by the R.E. on the AER 15, PCC Testing Summary, and submitted to IDA when updated.

In addition to the above described sample frequency, three (3), seven (7) and fourteen (14) day tests. The Engineer may require additional tests to maintain Quality Control.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 87-3, dated April 1, 2010

#### State of Illinois Department of Transportation Division of Aeronautics

# POLICY MEMORANDUM December 3, 2020 Springfield Number: 87-4

#### TO: CONSULTING ENGINEERS

#### SUBJECT: DETERMINATION OF BULK SPECIFIC GRAVITY (d) OF COMPACTED BITUMINOUS MIXES

A. SCOPE. This method of test covers the determination of the bulk specific gravity and the percent air, of core samples from compacted bituminous mixtures using a <u>saturated surface-dry</u> procedure.

#### B. DEFINITIONS.

- Bulk Specific Gravity (G<sub>mb</sub>) ASTM 2726 or density is the weight per unit volume (gms/cc) of a mixture in its existing state of consolidation. The volume measurement for this specific gravity will include the volume of all the aggregate, asphalt, and air spaces (voids) in the aggregate particles and between the aggregate particles.
- 2. Theoretical Maximum Specific Gravity (G<sub>mm</sub>) ASTM 2041 is the weight per unit volume (grams/cc) of a mixture assuming complete consolidation; i.e., all the air spaces (voids) between the aggregate particles are eliminated.
- 3. Percent Density is a measure of the degree of compaction in relation to the Theoretical Maximum Specific Gravity.
- 4. Percent Air is a measure of the air voids in the compacted pavement.

#### C. APPARATUS.

- 1. Balance The balance shall be accurate to 0.1 gm throughout the operating range. It may be mechanical or electrical and shall be equipped with a suitable suspension apparatus and holder to permit weighing of the core in water while suspended from the balance. If the balance is a beam type, it shall be set up so that the core is placed in the basket that is suspended from the zero (0) end of the balance arm.
- 2. Water bath The container for immersing the core in water while suspended from the balance shall be equipped with an overflow outlet for maintaining a constant water level. This water bath should be large enough to handle full-depth cores. When testing several cores at the same time, a dish-pan, sink or suitable container may be used for soaking.

#### D. PROCEDURE.

- 1. Prior to testing, cores shall be sorted on a flat surface in a cool place. The sample(s) shall be brushed with a wire brush and/or other suitable means, to remove all loose and/or foreign materials, such as seal coat, tack coat, foundation material, soil, paper and foil prior to testing.
- 2. If a core contains binder and surface or multiple lifts, the lifts shall be separated. This may be done in the following manner:
  - a. Mark the separation line between the two lifts.
  - b. Place the core in a freezer for 20-25 minutes.
  - c. Place a 2 or 3-inch wide chisel on the separation line and tap with a hammer. Rotate the core and continue this process until the core separates. Brush loose pieces with a wire brush if needed.
  - d. Allow 2-3 hours for the core to return to ambient temperature before proceeding.
- 3. Prepare the water baths for soaking and weighing with water at 77<sup>o</sup> F. Water baths should be maintained at this temperature throughout testing. Saturate the cores by submerging in the water for a minimum of 20 minutes.
- 4. With the balance and water bath properly assembled and zeroed, suspend the sample from the balance and submerge it in the water bath. The core must be placed with the original top and bottom in a <u>vertical</u> position. If necessary, add sufficient water to bring the water level up to the overflow outlet. Permit any excess to overflow. Read and record the Saturated Submerged Weight. Designate this weight as (C).
- 5. Remove the core from the water bath and blot the excess water from the surface of the core with an absorbent cloth or other suitable material. This must be done quickly to prevent the internal water from escaping.
- 6. Place the core on the balance and read and record the Saturated Surface-dry Weight in air. Designate this weight as (B).
- 7. Place the core in a tared pan and dry in an oven. When the core is dry (less than 0.5 gm loss in one hour), record the weight and subtract the pan weight. Designate this weight as (A).

8. The following calculation is used to determine the Bulk Specific Gravity of the core.

$$G_{mb} = \underline{A}$$
  
B - C

G<sub>mb</sub> = Bulk Specific Gravity A = Oven dry weight B = Saturated surface-dry weight C = Saturated submerged weight

E. PERCENT DENSITY. The following calculation is used to determine the percent density of the core:

% Density = 100 x <u>G<sub>mb</sub></u> G<sub>mm</sub>

 $G_{mb}$  = Bulk Specific Gravity  $G_{mm}$  = Theoretical Maximum Gravity\*

Note: The Theoretical Maximum Gravity (G<sub>mm</sub>) is determined from the mix design until current Vacuum Pycnometer test are available.

F. PERCENT AIR. To calculate the percent air, use the following formula:

% Air = 100 - % Density

G. WEIGHT PER SQUARE YARD OF COMPACTED MIXTURE. The actual weight per square yard of a compacted mixture can be calculated by using the Bulk Specific Gravity (G<sub>mb</sub>). The volume of a square yard of pavement <u>one (1) inch</u> thick is 0.75 cubic foot. Taking the weight of a cubic foot of water as 62.37 pounds, one square yard of compacted material, <u>one (1) inch</u> thick weighs:

Pounds / Sq. Yd. (1" thick) = 0.75 x 62.37 x G<sub>mb</sub>

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 87-4, dated February 20, 2014

#### State of Illinois Department of Transportation Division of Aeronautics

August 22, 2016

Springfield

POLICY MEMORANDUM

Number: 90-1

#### TO: CONSULTING ENGINEERS

SUBJECT: Resampling and Retesting of PCC Pavement

#### I. PURPOSE

This Policy Memorandum outlines the procedure for resampling and retesting of individual Lots of PCC Pavement for the determination of final Price Adjustment as permitted by the Special Provisions for Item 501 Portland Cement Concrete Pavement (Plain and Reinforced).

#### II. RESAMPLING AND RETESTING

If the contractor should request the resampling and retesting of a LOT, he must notify the Engineer in writing within 24 hours of receiving the written test results and payment results for the LOT in question. The entire LOT must be resampled (no selective resampling of individual sublots will be allowed) and the contractor is not allowed to take additional cores. Once approval to resample has been granted the contractor shall resample within five (5) working days. The Engineer will select random locations from each SUBLOT of the LOT in question and direct the contractor to drill two (2) 4 inch or 6 inch diameter cores from each location. The cores shall be obtained, cured and tested in accordance with ASTM C42, Obtaining and Testing Drilled Cores and Sawed Beams of Concrete. The Engineer will take possession of the cores once they have been cut by the contractor.

#### **III. CALCULATION FOR PRICE ADJUSTMENT**

1. When <u>Compressive Test Specification (501-3.6(A) Proportions) is specified</u>. The two (2) specimens from each SUBLOT shall be averaged to constitute one SUBLOT sample. The Percent Within Limits (PWL) for the LOT shall then be calculated in accordance with Item 501-5.3, Price Adjustment, of the Special Provisions using the sampled core compressive strengths and the Compressive Test formula. The final Price Adjustment shall be based on the PWL calculated using the sampled core compressive strengths. The test results of the resampled pavement are final. All costs associated with resampling, including, but not limited to testing, curing, and coring the concrete samples shall be borne by the contractor, regardless as to whether the test results increase or decrease calculated payment quantity of concrete pavement.

2. When <u>Flexural Test Specification (501-3.6(B) Proportions) is specified</u>. The two (2) specimens from each SUBLOT shall be averaged to constitute one SUBLOT sample. The SUBLOT samples shall then be averaged to obtain a LOT average. In order for the contractor to increase concrete payment quantity back to 100%, the LOT average shall be at least 6500 psi, and no individual SUBLOT sample shall be less than 6000 psi. Both the LOT average and SUBLOT sample strength requirements must be met in order for the concrete payment quantity to change back to 100%. If both requirements are not met, then the original concrete payment quantity calculated based on the Percent Within Limits (PWL) as outlined in 501-5.3, Price Adjustment, of the Special Provisions shall still apply. The test results of the resampled pavement are final. All costs associated with resampling, including, but not limited to testing, curing, and coring the concrete samples shall be borne by the contractor, regardless as to whether the test results increase or decrease calculated payment quantity of concrete payment.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 90-1, dated January 1, 2004

#### Illinois Department of Transportation Division of Aeronautics Materials Section

#### POLICY MEMORANDUM

January 1, 2004

Springfield

Number 95-1

#### TO: CONSULTING ENGINEERS

# SUBJECT: FIELD TEST PROCEDURES FOR MIXER PERFORMANCE AND CONCRETE UNIFORMITY TESTS

I. SCOPE

These methods describe the procedures for obtaining and testing representative samples of fresh concrete in the field to determine the consistency and mixer efficiency of stationary mixers at different mixing time periods.

The concrete produced during the mixing time investigation and not used in the test program may be incorporated in the project provided it conforms to the Standard Specifications for Construction of Airports.

A maximum of two mixing times shall be considered by the Department.

The contractor shall provide all of the necessary equipment and personnel to perform the tests and the Department will observe the testing.

#### II. APPARATUS REQUIRED

- a. Three (3) air meters conforming to the requirements of ASTM C231 or ASTM C173.
- b. Three (3) slump cone kits conforming to ASTM C143.
- c. One (1) No. 4 sieve having a minimum screen area of 2 sq. ft. The sieve shall conform to the requirements of AASHTO M92.
- d. One (1) platform scale graduated in tenths of a pound having a capacity sufficient to perform tests herein after specified.
- e. One (1) hydraulic or mechanical testing machine conforming to the requirements of the specified testing method for the project (ASTM C39 or ASTM C78).

- f. Flexural strength specimen forms as required. The forms shall be nominally 6x6x30 inch. Means shall be provided for securing the base plate firmly to the mold. The inside surfaces of the mold shall be smooth and free from holes, indentations, or ridges. The sides, bottom, and ends shall be at right angles and shall be straight and true so that the specimens will not be warped. Maximum variation from the nominal cross-section shall not exceed 1/8 inch. The assembled mold and base plate shall be lightly coated with mineral oil or other approved form release oil before use. Compressive strength specimens shall be 6x12 inch and prepared in accordance with ASTM C31.
- g. Sufficient water tanks for curing specimens as required by ASTM C31.
- h. Small tools such as shovels, scoops, buckets, etc., and water shall be furnished, as required.

#### III. MIXER

The mixer for which the mixing time is to be evaluated shall conform to the applicable sections of the Standard Specifications for Construction of Airports.

#### IV. MIXING TIME REQUIREMENTS

The minimum mixing time to be evaluated shall be specified in the Standard Specifications for Construction of Airports.

#### V. PROCEDURE

A minimum of ten (10) batches per drum shall be tested and evaluated for each original reduced mixing time request. Check tests shall consist of three (3) batches.

If the request is for a new, twin drum mixer, ten (10) batches shall be tested for the first drum and three (3) for the second drum.

Check tests are required if the mixer is moved, major maintenance performed, or if the source or type of aggregate has changed. A minimum frequency of check tests shall be one (1) per year.

#### a. Mixing Time

The mixing time and batch size to be evaluated shall be proposed by the contractor. The mixing time shall begin when all solid materials are in the mixing drum. The mixer timer shall register or indicate accurately the mixing time and a tolerance of two (2) seconds will be permitted.

If approved by the Engineer, minor adjustments in admixture dosage and water content will be allowed to account for weather conditions, provided that the maximum w/c ratio is not exceeded.

#### b. Sampling

At the conclusion of the mixing cycle, the mixer shall be discharged and appropriate samples obtained from the first, middle, and last third portions of the batch. Any appropriate method may be used, provided the samples are representative of the respective portions and not the very ends of the batch.

As an alternative, the mixer may be stopped, and the samples removed by any suitable means at equally spaced points from the front to the back of the drum.

#### c. Testing.

- Each third portion of the batch shall be tested simultaneously. The Contractor shall provide sufficient personnel to meet this requirement. The Contractor personnel performing the testing shall be Level I PCC Technicians or Concrete Testers. However, a Level I PCC Technician shall be provided to supervise the Concrete Tester.
- 2. From each third portion of the batch the mass (weight) of the concrete in one air meter measuring bowl shall be determined.
- 3. The air content of each third portion of the batch shall be determined according to ASTM C231 or ASTM C173. The air content shall be the arithmetic average of two (2) tests from each third portion of the batch.
- 4. The slump of each third portion of the batch shall be determined according to ASTM C143. The slump shall be the arithmetic average of two (2) tests from each third portion of the batch.
- 5. Flexural strength specimen(s) (two (2) breaks required) or two (2) compressive strength specimens shall be prepared from each third portion of the batch according to ASTM C31. Flexural strength specimen(s) (two (2) breaks required) shall be tested according to ASTM C78 at seven (7) days of age. Compressive strength specimens shall be tested according to ASTM C39 at seven (7) days of age.
- 6. The contents from the weighed air meter measuring bowl shall be washed over a No. 4 sieve. Shake as much water as possible from the material retained on the sieve and then weigh the material. The coarse aggregate content (portion of mass (weight) of sample retained on a No. 4 sieve), expressed as a percent, shall be calculated.

#### VI. CONCRETE UNIFORMITY REQUIREMENTS

- a. Test results from each third portion of the batch shall be compared to one another according to Table 1. Each batch shall be evaluated individually.
- b. Mixer performance tests consisting of ten (10) batches: If more than seven (7) tests out of the total or more than three (3) in any one criteria are not in compliance with the uniformity requirements (air content, slump, coarse aggregate content, and strength), a reduced mixing time will not be granted.
- c. Mixer performance tests consisting of three (3) batches: If more than three (3) tests out of the total are not in compliance with the uniformity requirements, a full ten (10) batch investigation shall be required.

Test	Requirement (Note 1)
Air Content, percent by volume of concrete	1.0 (Note 2)
Slump, inch	1.0 (Note 3)
Coarse aggregate content, portion by weight of each sample retained on the No. 4 sieve, percent	6.0
Average flexural or compressive strength at 7 days for each sample based on average strength of all comparative test specimens, percent	7.5 (Note 4)

#### **Table 1.** Requirements for Uniformity of Concrete

Note 1. Expressed as maximum permissible difference in results of tests of samples taken from three locations in the concrete batch.

Note 2. The average air content sample shall be the arithmetic average of two (2) tests.

Note 3. The average slump sample shall be the arithmetic average of two (2) tests.

Note 4. The average flexural strength of each sample shall be the arithmetic average of two (2) beam breaks. The average compressive strength of each sample shall be the arithmetic average of two (2) cylinder breaks.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 95-1 dated January 1, 1995

#### State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

March 28, 2022	Springfield	Number 96-1A

#### TO: CONSULTING ENGINEERS

SUBJECT: FOR AERONAUTICS 2020 STANDARD SPECIFICATIONS, ITEM 610, STRUCTURAL PORTLAND CEMENT CONCRETE: JOB MIX FORMULA APPROVAL & PRODUCTION TESTING.

- I. This policy memorandum addresses the Job Mix Formula (JMF) approval process and production testing requirements when Item 610 is specified for an airport construction contract.
- II. PROCESS
  - a. The contractor may submit a mix design with recent substantiating test data, or he may submit a mix design generated by the Illinois Division of Highways with recent substantiating test data for approval consideration. The mix design should be submitted to the Resident Engineer. An Item 501 PCC Pavement mix can be used in lieu of a Class SI mix, with the approval of the Division.
  - b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the 2020 Standard Specifications for Construction of Airports and/or the contract special provisions.
  - c. The mix design should also indicate the following information:
    - 1. The name, address, and producer/supplier number for the concrete.
    - 2. The source, producer/supplier number, gradation, quality, and SSD weight for the proposed coarse and fine aggregates.
    - 3. The source, producer/supplier number, type, and weight of the proposed flyash and/or cement.
    - 4. The source, producer/supplier number, dosage rate or dosage of all admixtures.
  - d. After completion of Items b and c above, the mix with substantiating test data shall be forwarded to the Division of Aeronautics for approval. Once the mix has been approved, the production testing shall be at the rate in Section III as specified herein.

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#### III. PRODUCTION TESTING

- When directed by the Resident Engineer, the Contractor shall make, cure and store one set of cylinders in accordance with AASHTO T23 for acceptance testing for each day the mix is used. In addition, at least one slump, one mix temperature, and one air test shall be conducted for each day the mix is used.
- b. The concrete shall have a maximum slump of four inches (4") and minimum slump of two inches (2") when tested in accordance with AASHTO T119.
- c. The air content of the concrete shall be between 5% and 8% by volume when tested in accordance with AAHSTO T152.
- d. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- e. Acceptance testing for concrete provided under this item shall have a 14-day compressive strength of not less than 3,500 psi when tested in accordance with AASHTO T22. The testing lab shall be IDOT or AASHTO approved. The Resident Engineer will be responsible for the strength tests on the specimens at no expense to the contractor.
- f. If more than 100 cubic yards of the mix is placed in a given day, additional tests at a frequency of 1 per 100 cubic yards shall be taken for strength, slump, mix temperature, and air.
- g. The Resident Engineer shall collect actual batch weight tickets for every batch of Item 610 concrete used for the project. The actual batch weight tickets shall be kept with the project records and shall be available upon request of the Department of Transportation.

William C. Eves, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 96-1 (2020) dated December 3, 2020

#### State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number 96-3

#### TO: CONSULTING ENGINEERS

#### SUBJECT: REQUIREMENTS FOR QUALITY ASSURANCE ON PROJECTS WITH BITUMINOUS CONCRETE PAVING

#### I. SCOPE

The purpose of this policy memorandum is to define to the Consulting Engineer the requirements concerning Quality Assurance on bituminous concrete paving projects. Specifically, this memo applies whenever the Contractor is required to comply with the requirements set forth in Policy Memorandum 2003-1, "*Requirements for Laboratory, Testing, Quality Control, and Paving of Bituminous Concrete Mixtures*".

#### II. LABORATORY APPROVAL

The Resident Engineer shall review and approve the Contractor's plant laboratory to assure that it meets the requirements set forth in the contract specifications and Policy Memorandum 2003-1. This review and approval shall be completed prior to utilization of the plant for the production of any mix.

#### III. QUALITY ASSURANCE DURING PRODUCTION PAVING

A. The R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. designated by the Division of Aeronautics. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Sample preparation, sample size and number of samples shall be according to Policy Memorandum, "*HMA Comparison Samples*".

B. At the option of the Engineer, additional independent assurance tests may be performed on split samples taken by the Contractor for Quality Control testing. In addition, the Resident Engineer shall witness the sampling and splitting of these samples at the start of production and as needed throughout mix production. The Engineer may select any or all split samples for assurance testing. These tests may be performed at any time after sampling. The test results will be made available to the Contractor as soon as they become available.

- C. The Resident Engineer may witness the sampling and testing being performed by the Contractor. If the Resident Engineer determines that the sampling and Quality Control tests are not being performed according to the applicable test procedures, the Engineer may stop production until corrective action is taken. The Resident Engineer will promptly notify the Contractor, both verbally and in writing, of observed deficiencies. The Resident Engineer will document all witnessed samples and tests. The Resident Engineer may elect to obtain samples for testing, separate from the Contractor's Quality Control process, to verify specification compliance.
  - 1. Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits:

Test Parameter	Acceptable Limits of Precision
% Passing	
1/2 in.	5.0 %
No. 4	5.0 %
No. 8	3.0 %
No. 30	2.0 %
No. 200	2.2 %
Asphalt Content	0.3 %
Maximum Specific Gravity (Gmm	) of Mixture 0.026
Bulk Specific Gravity (G <sub>mb</sub> ) of G	yratory Brix 0.045

2. In the event a comparison of the required plant test results is outside the above acceptable limits of precision, split or independent samples fail the control limits, an extraction indicates non-specification mix, or a continual trend of difference between Contractor and Engineer test results is identified, the Engineer will immediately investigate. The Engineer may suspend production while the investigation is in progress. The investigation may include testing by the Engineer of any remaining split samples or a comparison of split sample test results on the mix currently being produced. The investigation may also include review and observation of the Contractor's technician performance, testing procedure, and equipment. If a problem is identified with the mix, the Contractor and the Engineer shall immediately resample and retest.

C. The Contractor shall be responsible for documenting all observations, records of inspection, adjustments to the mixture, test results, retest results, and corrective actions in a bound hardback field book or bound diary which will become the property of IDA upon completion and acceptance of the project. The Contractor shall be responsible for the maintenance of all permanent records whether obtained by the Contractor, the Contractor's Consultants, or the producer of bituminous mix material. The Contractor shall provide the Engineer full access to all documentation throughout the progress of the work.

Results of adjustments to mixture production and tests shall be recorded in duplicate and sent to the Engineer.

#### IV. ACCEPTANCE BY ENGINEER

Density acceptance shall be performed according to the Standard Specifications for Construction of Airports, section 401-6.1 or according to the acceptance procedure outlined in the Special Provisions.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 96-3, dated February 20, 2014

#### State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

December 3, 2020 Springfield, Illinois Number 97-2

#### TO: CONSULTING ENGINEERS

#### SUBJECT: PAVEMENT MARKING PAINT AND GLASS BEADS ACCEPTANCE

#### I. SCOPE

The purpose of this policy memorandum is to define the procedure for acceptance of pavement marking paint and glass beads.

#### II. RESIDENT ENGINEER'S DUTIES

The Resident Engineer shall follow the acceptance procedure outlined as follows:

- A. Require the contractor to furnish the name of the paint and glass beads manufacturer, IDOT Test I.D. number and the Batch/Lot number proposed for use prior to beginning work. Notify the I.D.A. Materials Certification Engineer when this information is available.
- B. Require the manufacturer's certification before painting begins. Check the certification for compliance to the contract specifications.
  - 1. The certification shall be issued from the manufacturer and shall include the specification and the batch number.
  - 2. The paint containers shall have the manufacturer's name, the specification and the batch number matching the certification.
- C. If no batch number is indicated on the certification or containers, sample the paint according to the procedure for the corresponding paint type.
- D. If the I.D.A. Engineer of Materials indicates that batch number has not been previously sampled and tested, sample the paint according to the procedure for the corresponding paint type. The Division of Aeronautics will provide paint cans upon request by the Resident Engineer. Samples will only be taken in new epoxy lined cans and lids so that the paint will not be contaminated. It is important to seal the sample container immediately with the paint can lid to prevent the loss of volatile solvents.

Mark the sample cans with the paint color, manufacturer's name, and batch number. The paint samples and manufacturer's certification shall be placed in the mail or delivered within 24 hours after sampling. Address or deliver the samples to the Material's Certification Engineer at:

> Illinois Department of Transportation Division of Aeronautics One Langhorne Bond Drive Springfield, Illinois 62707

Sampling Procedures for Each Paint Type:

- 1. Waterborne or Solvent Base Paints
  - a. A sample consists of one-pint cans taken per batch number. Before drawing samples, the contents of the component's container must be <u>thoroughly</u> mixed to make certain that any settled portion is fully dispersed.
  - b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.
- 2. Epoxy Paint
  - a. Take separate one-pint samples of each paint component prior to marking. Before drawing samples, the contents of each component's container must be <u>thoroughly</u> mixed to make certain that any settled portion is fully dispersed. **Do not combine the two components or sample from the spray nozzle.**
  - b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

#### III. TESTING

The paint will be tested for acceptance by the IDOT Bureau of Materials and Physical Research for conformance to the contract specifications.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes policy memorandum 97-2 dated June 22, 2018

#### State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number: 2001-1

#### **TO: CONTRACTORS**

#### SUBJECT: REQUIREMENTS FOR COLD WEATHER CONCRETING

- I. PURPOSE
  - A. This policy memorandum outlines the minimum requirements for cold weather concreting. Cold weather is defined as whenever the average ambient air temperature during day or night drops below 40 F.

#### II. COLD WEATHER CONCRETING PLAN

- A. The contractor shall submit a cold weather concreting plan to the Engineer for approval. Cold weather concreting operations are not allowed to proceed until the contractor's cold weather concreting plan has been approved by the Engineer.
- B. The contractor's plan shall comply with this memorandum and shall address, as a minimum, the following:
  - 1. Concrete Mix Manufacturing
  - 2. Concrete Mix Temperature Monitoring
  - 3. Base Preparation
  - 4. Concrete Curing and Protection
  - 5. In Place Concrete Temperature Monitoring
  - 6. Strength Test Specimens

#### III. MINIMUM REQUIREMENTS

- A. Concrete Mix Manufacturing
  - 1. The contractor must make the necessary adjustments so that the concrete temperature is maintained from 50 F to 90 F for placement. Acceptable methods include:
    - a) <u>Heating the mixing water</u> Note: If the mixing water is to be heated to a temperature above 100 F, the contractor must include a mixing sequence plan to indicate the order that each component of the mix is to be charged into the mixer.

 b) <u>Heating the aggregates</u> Note: The exact method of heating the aggregates shall be included as part of the cold weather concreting plan. Aggregates must be free of ice and frozen lumps. To avoid the possibility of a quick or flash set of the concrete, when either the water or aggregates are heated to above 100 F, they should be combined in the mixer first before the cement is added.

#### B. Concrete Mix Temperature

- 1. The contractor shall monitor the mix temperature at the plant and prior to placement in the forms. Mix that does not meet the temperature requirement of 50 F to 90 F shall be rejected for use on the project.
- C. Base Preparation
  - 1. Paving or placing concrete on a frozen base, subbase, or subgrade is prohibited.
  - 2. The base, subbase, or subgrade on which the concrete is to be placed shall be thawed and heated to at least 40 F. The method by which the base subbase or subgrade is to be heated shall be indicated in the contractor's cold weather concreting plan. Insulating blankets or heated enclosures may be required.
- D. Concrete Protection and Curing
  - In addition to the curing options available in article 501-4.13

     (a) (b), (c), (d), and (e) of the Standard Specifications for Construction of Airports, the contractor shall protect the concrete in such a manner as to maintain a concrete temperature of at least 50 F for 7 days.
  - 2. The method of concrete protection shall be by use of insulating layer or heated enclosure around the concrete. The method of protection shall be indicated in the contractor's cold weather concreting plan. When insulating layers are to be used, the thermal resistance to heat transfer (R Value in F\*hr\*ft²/BTU) of the insulation material selected, shall be appropriate for the slab thickness being constructed and shall be indicated in the cold weather concreting plan.
  - 3. <u>Appendix A</u> shows a chart and table taken from the American Concrete Institute specification, ACI 306 R Cold Weather Concreting, which may be used by the contractor in selecting the proper insulation (R Value) and insulating material which may be used.
- E. In-Place Concrete Temperature Monitoring

- Once the concrete is in place, the protection method used, must ensure that the concrete temperature does not fall below 50 F for the time period specified in Section (D. 1.) of this Policy Memorandum (7 days).
- 2. The concrete temperature on the surface and below the surface must be monitored and recorded by the contractor for the duration of the protection period in Section (D. 1.).
- 3. After the concrete has hardened, surface temperature can be checked with special surface thermometers or with an ordinary thermometer that is kept covered with insulating blankets. The high and low values for each 24-hour period of protection must be measured and recorded.
- 4. One acceptable method of checking temperature below the concrete surface is given in the Portland Cement Association (PCA) book entitled "Design and Control of Concrete Mixtures" latest edition. The method is indicated below and it should be noted that the thermometer should be capable of recording high and low values for a given 24-hour period.



- The exact method for <u>surface</u> and <u>sub-surface</u> concrete temperature monitoring shall be indicated in the contractor's cold weather concreting plan. The maximum permissible difference between the interior and surface temperature is 35
   F. Adjustments in protection method shall be implemented if the maximum permissible difference is exceeded.
- F. Strength specimen handling
  - 1. The Contractor is responsible for making, transporting, and curing all samples (beams or cylinders)
  - 2. The Contractor is required to load the testing machine and dispose of the broken pieces.
  - Onsite, indoor curing facilities, meeting the requirements of ASTM C-31, shall be required for cold weather concreting operations.

- 4. Sampling for strength specimens shall be according to the Contract Special Provisions. Sampled concrete shall be transported to the indoor curing facilities for the casting of strength specimens.
- 5. The exact location and description of the curing facilities shall be indicated in the contractor's cold weather concreting plan.
- 6. The method of transporting concrete sampled from the grade to the curing facilities for casting shall be indicated in the contractor's cold weather concreting plan.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2001-1 dated January 1, 2004

# **APPENDIX** A

	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance <b>R</b> , hr-ft <sup>2</sup> -F/Btu (m <sup>2</sup> -K/W), is used			
Slab thickness, in. (m)	<b>R</b> = 2 (0.35)	<b>R</b> = 4 (0.70)	<b>R</b> = 6 (1.06)	<b>R</b> = 8 (1.41)
	Cement content	= 300 lb/yd2 (178 kg	ı/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	*	*	*	*
18 (0.46)	42 (6)	38 (3)	32 (0)	26 (-3)
24 (0.61)	37 (3)	25 (-4)	11 (-12)	-3 (-19)
30 (0.76)	31 (-1)	15 (-9)	-1 (-18)	-17 (-27)
36 (0.91)	31 (-1)	12 (-11)	-5 (-21)	-22 (-30)
	Cement content	= 400 lb/yd2 (237 kg	j/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	46 (8)	44 (7)	42 (6)	40 (4)
18 (0.46)	36 (2)	22 (-6)	8 (-13)	-6 (-21)
24 (0.61)	28 (-2)	9 (-13)	-10 (-23)	-29 (-34)
30 (0.76)	21 (-6)	0 (-18)	-21 (-29)	-42 (-41)
36 (0.91)	21 (-6)	-4 (-20)	-29 (-34)	-50 (-46)
	Cement content	= 500 lb/yd2 (296 kg	j/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	42 (6)	36 (2)	30 (-1)	24 (-4)
18 (0.46)	30 (-1)	12 (-11)	-6 (-21)	-22 (-30)
24 (0.61)	21 (-6)	-5 (-21)	-31 (-35)	-50 (-46)
30 (0.76)	16 (-9)	-10 (-23)	-42 (-41)	-74 (-59)
36 (0.91)	16 (-9)	-18 (-28)	-50 (-46)	#
	Cement content	= 600 lb/yd2 (356 kg	ı/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	38 (3)	26 (-3)	14 (-10)	2 (-17)
18 (0.46)	24 (-4)	0 (-18)	-24 (-31)	-48 (-44)
24 (0.61)	14 (-10)	-16 (-27)	-46 (-43)	-82 (-63)
30 (0.76)	10 (-12)	-20 (-29)	-62 (-52)	#
36 (0.91)	7 (-14)	-30 (-34)	#	#

# Minimum exposure temperatures for concrete flatwork placed on the ground for concrete placed & surface temperature maintained at 50 F (10 C) for 3 days on ground at 35 F (2 C)

\* > 50 F (10 C): additional heat required

# << -60 F (-51 C)

	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance <b>R</b> , hr-ft <sup>2</sup> -F/Btu (m <sup>2</sup> -K/W), is used			
Slab thickness, in. (m)	<b>R</b> = 2 (0.35)	<b>R</b> = 4 (0.70)	<b>R</b> = 6 (1.06)	<b>R</b> = 8 (1.41)
	Cement content	= 300 lb/yd2 (178 kg	j/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	*	*	*	*
18 (0.46)	46 (8)	42 (6)	36 (2)	30 (-1)
24 (0.61)	40 (4)	31 (-1)	22 (-6)	11 (-12)
30 (0.76)	35 (2)	22 (-6)	7 (-14)	-8 (-22)
36 (0.91)	31 (-1)	13 (-11)	-5 (-21)	-23 (-31)
	Cement content	= 400 lb/yd2 (237 kg	j/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	*	*	*	*
18 (0.46)	41 (5)	32 (0)	22 (-6)	12 (-11)
24 (0.61)	35 (2)	19 (-7)	-1 (-17)	-15 (-26)
30 (0.76)	28 (-2)	8 (-13)	-14 (-26)	-36 (-38)
36 (0.91)	23 (-5)	-4 (-20)	-29 (-34)	-54 (-48)
	Cement content = 500 lb/yd2 (296 kg/m2)			
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	48 (9)	44 (7)	40 (4)	36 (2)
18 (0.46)	36 (2)	22 (-6)	8 (-13)	-6 (-21)
24 (0.61)	28 (-2)	6 (-14)	-16 (-27)	-38 (-39)
30 (0.76)	22 (-6)	-7 (-22)	-36 (-38)	-64 (-53)
36 (0.91)	16 (-9)	-18 (-28)	-50 (-46)	#
	Cement content	= 600 lb/yd2 (356 kg	ı/m2)	
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	44 (7)	38 (3)	32 (0)	26 (-3)
18 (0.46)	31 (-1)	14 (-10)	-5 (-21)	-24 (-31)
24 (0.61)	22 (-6)	-5 (-21)	-32 (-36)	-61 (-52)
30 (0.76)	14 (-10)	-19 (-28)	-67 (-55)	#
36 (0.91)	7 (-14)	-30 (-34)	#	#

# Minimum exposure temperatures for concrete flatwork placed on the ground for concrete placed & surface temperature maintained at 50 F (10 C) for 7 days on ground at 35 F (2 C)

\* > 50 F (10 C): additional heat required

# < -60 F (-51 C)

#### Thermal Resistance of Various Insulating Materials

Insulating MaterialThermal resistance "R" for these thicknesses of material*1 in., hr·ft3·F / Boards and slabs10 mm, m3·K/ WBoards and slabsExpanded polyurethane (R-11 exp.)6.25Expanded polystyrene extruded (R-11 exp.)5Expanded polystyrene extruded (R-11 exp.)0.277Expanded polystyrene extruded, plain40.277Glass fiber, organic bonded40.277Expanded polystyrene, molded beads3.570.247Mineral fiber with resin binder3.450.204Sheathing, regular density2.630.182Laminated paperboard20.139Particle board (low density)1.850.128	Materials		
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		1.25	0.087
Blanket			
Mineral fiber, fibrous form processed	•		
		3.23	0.224
Loose fill	Loose fill		
		3.33	0.231
			0.173
		2.7	0.187
Vermiculite (exfoliated) 2.2 0.152	Vermiculite (exfoliated)	2.2	0.152
Sawdust or shavings 2.22 0.154	Sawdust or shavings	2.22	0.154

\*Values from ASHRAE Handbook of Fundamentals, 1977, American Society of Heating, Refrigerating, and Air-Conditioning Engineers, New York. State of Illinois Department of Transportation Division of Aeronautics

#### POLICY MEMORANDUM

December 3, 2020

Springfield, Illinois

Number 2003-1

#### TO: CONSULTANTS & CONTRACTORS

## SUBJECT: REQUIREMENTS FOR LABORATORY, TESTING, QUALITY CONTROL, AND PAVING OF SUPERPAVE HMA CONCRETE MIXTURES FOR AIRPORTS

#### I. SCOPE

The purpose of this policy memorandum is to define to the Contractor the requirements concerning the laboratory, testing, Quality Control, and paving of HMA mixtures utilizing Superpave technology. References are made to the most recent issue of the Standard Specifications for Construction of Airports (Standard Specifications) and to American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO) and IDOT Bureau of Materials Illinois Lab Procedure (ITP) testing methods. The Quality Assurance and acceptance responsibilities of the Resident Engineer are described in Policy Memorandum 96-3.

#### II. LABORATORY

The Contractor shall provide a laboratory located, at the plant, according to the current Illinois Department of Transportation, Bureau of Materials Policy Memorandum (PM) 6-08, *Minimum Private Laboratory Requirements for Construction Materials Testing or Mix Design.* The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Hot Mix Asphalt (HMA) Job Mix Formula (JMF), Quality Control (QC) testing and Quality Assurance (QA) testing. The laboratory and equipment furnished by the Contractor shall be properly calibrated and maintained. The Contractor shall maintain a record of calibration results at the laboratory. The Engineer may inspect measuring and testing devices at any time to confirm both calibration and condition. If the Engineer determines that the equipment is not within the limits of dimensions or calibration described in the appropriate test method, he may stop production until corrective action is taken. If laboratory equipment becomes inoperable or insufficient to keep up with mix production testing, the Contractor shall cease mix production until adequate and/or sufficient equipment is provided.

#### III. MIX DESIGN SUBMITTAL

Based upon data and test results submitted by the Contractor, the Illinois Division of Aeronautics (IDA) Engineer of Construction & Materials shall issue the final Job Mix Formula (JMF) approval letter that concurs or rejects the Contractor's proposed JMF. The Contractor will be required to perform the sampling and laboratory testing and develop a complete mix design, according to the following guidelines: <u>Mix design</u> submittals should be submitted to IDA, Construction/Material Section, <u>Attn: Certification and Mixtures Engineer</u>. Note: Quality Control (QC) Managers shall

be Level III QC/QA qualified and will be responsible for all mix designs. All Technicians obtaining samples and performing gradations shall have successfully completed the IDOT Mixture Aggregate Technician Course and Technicians performing mix design testing and plant sampling/testing shall have successfully completed the IDOT Bituminous Concrete Level 1 Technician Course under the Illinois Department of Transportation, Bureau of Materials & Physical Research QC/QA Training Program.

- A. Initial Mix Design Submittal
  - 1. Use the first tab/page of the IDOT, QC/QA Package, Mix Design Software spreadsheet workbook. Provide the Producer name, Producer # and Producer location of each aggregate and asphalt binder (AB). Producers are assigned Producer numbers by IDOT Central Bureau of Materials.
  - 2. Material code for each aggregate.
  - 3. Aggregate Gradations per ASTM C-136 (The Contractor shall obtain representative samples of each aggregate).
  - 4. Material code for each aggregate (i.e. 022CM11, etc.).
  - 5. Material code for the grade of AB.
  - Proposed Aggregate Blend (% for each aggregate) Note: Based on the gradation results, the Contractor shall select the blend percentages that comply with the Standard Specifications, Section 401/403 3.3 (Table: Aggregate Asphalt Pavements)
  - 7. Producer name, Producer #, and specific gravity of the proposed asphalt cement.
  - 8. IDOT approved Performance Grade (PG) Binder shall be used unless otherwise specified by the IDA Engineer of Construction & Materials.

After verification and approval by IDA of the proposed design information from this Section A, Initial Mix Design Submittal, the Contractor shall proceed to Section B, Mixture Design and Testing, and perform mixture tests on 4 gyratory brix sample (4 point mix design) to determine the optimum AB content for the target Air Voids.

Note: If Section A, Initial Mix Design Submittal, is not performed first, and the complete mix design (gyratory testing) is submitted with an unapproved material source or an incorrect aggregate blend, then the gyratory laboratory testing would have to be redone. B. Preliminary Mixture Design & Testing

Design Parameters

Gyrations (N<sub>des</sub>) – per Standard Specifications for Construction of Airports (Standard Specifications), Section 401/403 – 3.3 (JMF), Table (Asphalt Design Criteria) Asphalt Content – AC% per Standard Specifications, Section 401/403 – 3.3 (JMF), Table (Aggregate – Asphalt Pavements) Maximum Specific Gravity – G<sub>mm</sub> (AAHSTO T 209) Bulk Specific Gravity – G<sub>mb</sub> (AAHTO T 166) % air voids – V<sub>a</sub> (ASTM D3203) per Standard Specifications, Section 401/403 – 3.3 Table (Asphalt Design Criteria) VFA % – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table (Asphalt Design Criteria)

C. Preliminary Mix Design Submittal

The Preliminary JMF including all test results shall be submitted to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer with the following data:

- a) Aggregate & asphalt cement material codes
- b) Aggregate & asphalt cement producer numbers, names, and locations
- c) Percentage of each individual aggregate
- d) Aggregate blend % for each sieve
- e) AC Specific Gravity
- f) Bulk Specific Gravity and Absorption for each aggregate
- g) Summary of Superpave Design Data: AC % Mix, G<sub>mb</sub>, G<sub>mm</sub>, VMA, Voids (Total Mix), Voids Filled, V<sub>be</sub>, P<sub>be</sub>, P<sub>ba</sub>, G<sub>se</sub>
- h) Optimum design data listing: AC % Mix, G<sub>mb</sub>, G<sub>mm</sub>, VMA, Voids (Total Mix), Voids Filled, G<sub>se</sub>, G<sub>sb</sub>
- i) Percent of asphalt that any RAP will add to the mix
- j) Graphs for the following: Gradation on 0.45 Power Curve, AC vs. Voids (Total Mix), AC vs. Specific Gravities, AC vs. Voids Filled, AC vs. VMA
- k) Tensile Strength Ratio (TSR)
- I) Type and amount of anti-strip agent when used
- m) Date the JMF was developed
- D. Mix Approval

Once the preliminary JMF is reviewed and approved by IDA, a JMF approval letter will be issued to the consultant and contractor. Production of HMA is not authorized until a JMF letter has been issued.

E. Change in Material Sources

The above procedure, III. MIX DESIGN SUBMITTAL, shall be repeated for each change in material source or gradation of aggregate materials.

#### IV. MIX PRODUCTION TESTING

The Quality Control (QC) of the manufacture and placement of HMA mixtures is the responsibility of the Contractor and will be according to the Standard Specifications, Section 401/403-5.1 - 5.6. In addition, the Contractor shall develop a Contractor Quality Control Program (CQCP) in accordance with Item 100 in the Standard Specifications. The (CQCP) shall be submitted on the Form AER 27. Hot Mix Asphalt (HMA) Quality Control Plan. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Quality Control includes the recognition of defects and their immediate correction. This may require increased testing, communication of test results to the plant or the job site, modification of operations, suspension of HMA production, rejection of material, or other actions as appropriate. The Resident Engineer shall be immediately notified of any failing tests and subsequent remedial action. Form AER-14 shall be reported to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer and the Resident Engineer no later than the start of the next workday. The Contractor shall provide a Quality Control (QC) Manager who will have overall responsibility and authority for Quality Control. This individual shall have successfully completed the IDOT Division of Highways HMA Concrete Level II Technician Course "HMA Proportioning and Mixture Evaluation." In addition to the QC Manager, the Contractor shall provide sufficient and qualified personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner.

V. TEST SECTION (Note: Applies for Method II only (≥ 2,000 tons/pay item))

The purpose of the test section is to determine if the mix is acceptable and can be compacted to a consistent passing density. The test strip construction and acceptance will be according to the Standard Specifications, Section 401/403-3.5.

#### VI. MATERIAL ACCEPTANCE

Material acceptance and acceptance sampling to determine conformance to the contract specifications will be performed by the Resident Engineer in accordance with the Standard Specifications, Section 401/403-6.1. In addition to the requirements set forth in Section 401/403-6.1 the R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Alan D. Mlacnik, P.E. Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2003-1 dated June 12, 2004



### Memorandum

To:	Airport Consultants and Contractors
From:	William Eves, P.E.
Subject:	HMA Comparison Samples
Date:	December 7, 2020

In accordance with Policy Memorandum 96-3, the Resident Engineer (R.E.) shall obtain split comparison samples from the contractor for testing by an ASTM-certified, independent testing laboratory. In order to reduce splitting errors, the R.E. shall request that the contractor split the sample down to individual test sample size. The split samples shall be placed in individual paper bags for each test.

The following list shows the number and size of each sample:

3 Superpave Gyratory Brix (Gmb)	3 bags:	4800 grams each
Vacuum Pycnometer Test (Gmm)	2 bags:	1500 grams each
Ignition Oven or Extraction	2 bags:	1500 grams each

Each paper bag shall be identified with the following information:

Airport Name: Illinois Project Number: Type of Mix (Base or Surface): Date Sampled: Lot-Sublot Number: Type of test (Brix - Pycnometer - Ignition Oven or Extraction):

For the samples identified as brix the R.E. shall also include the number of gyrations that are required in the construction contract: Illinois Standard Specifications for Construction of Airports (September 25, 2020), Items 401 and 403, Asphalt Design Criteria.

#### NUMBER OF SAMPLES TO BE SUBMITTED FOR TESTING

One per test section for each type of mix, then one randomly selected sample for each 5000 tons of mix produced under production paving. Projects with less than 5000 tons of mix shall have one split sample tested per mix type for the project in addition to the test section split sample, if a test section is specified. The split samples not selected shall be stored by the contractor for use at the discretion of the Division of Aeronautics.

The R.E. shall place all seven (7) bags in a box along with all samples and ship them to an ASTM-certified, independent lab for testing. The cost of all testing

is to be borne by the Consultant. The lab shall be chosen by the Consultant but shall not be the same one used by the Contractor. All testing results shall be obtained in a timely manner. The R.E. shall also fill out the sample identification sheet, which shall be sent to the laboratory. Copies of the sample identification sheet and all testing results shall be submitted to:

> Illinois Department of Transportation, Division of Aeronautics Attn: Mixtures and Certification Engineer

Supersedes Comparison Samples Memorandum, dated February 20, 2014

#### ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS

#### SAMPLE IDENTIFICATION

AIRPORT	
ILLINOIS PROJECT NO.	
MIX PRODUCER	
PRODUCER NUMBER	
TYPE OF MIX	
LOT NUMBER	SUBLOT NUMBER
DATE SAMPLED	
SAMPLED FROM	
# OF GYRATIONS	
COMMENTS	

#### FILL IN ALL BLANKS

#### R.E. or REPRESENTATIVE SIGNATURE

EMAIL COPY TO:

DIVISION OF AERONAUTICS MIXTURES and CERTIFICATIONS ENGINEER

NOTE: Samples should be submitted on day of sampling but no later than 48 hours.