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Letting March 11, 2022

Notice to Bidders, Specifications and Proposal



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. WH016
Whiteside County Airport
Rock Falls, Illinois
Whiteside County
Illinois Project No. SQI-4895
SBG Project No. 3-17-SBGP-171**



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. on March 11, 2022, 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. WH016
Whiteside County Airport
Rock Falls, Illinois
Whiteside County
Illinois Project No. SQI-4895
SBG Project No. 3-17-SBGP-171**

Construct, light, and mark parallel taxiway to Runway 36 End: South End Connector

For engineering information, please contact Travis Strait, P.E. of Crawford, Murphy & Tilly, Inc. at 309.277.6608.

3. INSTRUCTIONS TO BIDDERS.

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

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

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

- 6. DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 7.0%.

- 7. SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Standard Specifications for Construction of Airports (Adopted September 25, 2020 & Revised November 12, 2021), the Special Provisions dated January 14, 2022, and the Construction Plans dated January 14, 2022 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 62 calendar days.

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

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

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

By Order of the
Illinois Department of Transportation

Omer Osman,
Secretary

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS

REQUIRED CONTRACT PROVISIONS FOR STATE FUNDED AIRPORT CONSTRUCTION PROJECTS

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

DISADVANTAGED BUSINESS POLICY

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

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

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

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

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

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

SPECIAL PROVISION FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: March 2, 2019

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

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

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

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

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

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 7.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

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

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

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

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

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

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

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

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

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

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quotes 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.DBUEP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

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

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

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

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

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

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

(e) DBE as a material supplier:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: November 1, 2021

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

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

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

SPECIAL PROVISION FOR SUBCONTRACTOR MOBILIZATION PAYMENTS

Effective: November 2, 2017

Revised: April 1, 2019

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

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

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

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

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

SPECIAL PROVISION FOR PAYMENTS TO SUBCONTRACTORS

Effective: November 2, 2017

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

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

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

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

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

SPECIAL PROVISION FOR SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Subcontractor and Disadvantaged Business Enterprise Payment Reporting

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

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

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

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

Effective: February 1, 1969

Revised: January 1, 2017

EQUAL EMPLOYMENT OPPORTUNITY

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

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

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

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

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

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

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

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

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

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

SPECIAL PROVISION FOR NPDES CERTIFICATION

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

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

The Airport Owner or its Agent will:

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

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

SPECIAL PROVISION FOR COMPLETION TIME VIA CALENDAR DAYS

It being understood and agreed that the completion within the time limit is an essential part of the contract, the bidder agrees to complete the work within 62 calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been

allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
SECTION 80 PROSECUTION AND PROGRESS

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

80-09 Failure to complete on time.

ADD:

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

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
SECTION 90 MEASUREMENT AND PAYMENT

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

90-07 Partial payments.

DELETE: The entire section.

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

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Department to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in Section 90-09 ACCEPTANCE AND FINAL PAYMENT.

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

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

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

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

90-09 Trust agreement option.

DELETE: The entire section.

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

A1 ACCESS TO RECORDS AND REPORTS

A1.1 CONTRACT CLAUSE

ACCESS TO RECORDS AND REPORTS

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

A2 AFFIRMATIVE ACTION REQUIREMENTS

A2.1 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:

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

AREA COVERED (STATEWIDE)

Goals for Women apply nationwide.

GOAL

Goal (percent)

Female Utilization..... 6.9

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

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

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

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

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

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

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

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is Rock Falls, Illinois; Whiteside 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 now equal to \$150,000.

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 the 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 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 CONTRACT CLAUSE

- (a) The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program (AIP).
- (b) Any and all steel products used in the performance of this contract by the Contractor, subcontractors, producers, and suppliers are required to adhere to the Illinois Steel Products Procurement Act, which requires that all steel items be of 100 percent domestic origin and manufacture. Any products listed under the Federal Aviation Administration's (FAA) nationwide approved list of "Equipment Meeting Buy American Requirements" shall be deemed as meeting the requirements of the Illinois Steel Products Procurement Act.
- (c) The successful bidder will be required to assure that only domestic steel and domestically manufactured products will be used by the Contractor, subcontractors, producers, and suppliers in the performance of this contract. The North American Free Trade Agreement (NAFTA) specifically excluded federal grant programs such as the AIP. Therefore, NAFTA does not change the requirement to comply with the Buy American requirement in the Act. Exceptions to this are for products, other than steel, that:
 - (1) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality;
 - (2) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest;

- (3) the FAA has determined that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent; or
- (4) the FAA has determined, under the Aviation Safety and Capacity Expansion Act of 1990,
 - (i) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment, and
 - (ii) final assembly of the facility or equipment has occurred in the United States.

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

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

A5 CIVIL RIGHTS - GENERAL

A5.1 CONTRACT CLAUSE

GENERAL CIVIL RIGHTS PROVISIONS

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

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

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.1 CONTRACT CLAUSE

A6.1.1 Title VI Solicitation Notice

Title VI Solicitation Notice:

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

A6.1.2 Title VI Clauses for Compliance with Nondiscrimination Requirements

Compliance with Nondiscrimination Requirements

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

Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

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

Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.

Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

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

A6.1.3 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Title VI List of Pertinent Nondiscrimination Acts and Authorities

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

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.1 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 U.S.C. § 740-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

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

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.1 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 \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

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

4. Subcontractors.

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

A9 COPELAND "ANTI-KICKBACK" ACT

A9.1 CONTRACT CLAUSE

COPELAND "ANTI-KICKBACK" ACT

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

A10 DAVIS-BACON REQUIREMENTS

A10.1 CONTRACT CLAUSE

DAVIS-BACON REQUIREMENTS

1. Minimum Wages

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

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

section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

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

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

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

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

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

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

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

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

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

2 Withholding.

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

3. Payrolls and basic records.

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

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Federal Aviation

Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

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

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

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

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

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

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

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

4. Apprentices and Trainees.

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

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

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

5. Compliance with Copeland Act Requirements.

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

6. Subcontracts.

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

7. Contract Termination: Debarment.

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

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

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

9. Disputes Concerning Labor Standards.

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

10. Certification of Eligibility.

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

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

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

A11 DEBARMENT AND SUSPENSION

A11.1 CONTRACT CLAUSE

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 verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>
2. Collecting a certification statement similar to the Certificate Regarding Debarment and Suspension (Bidder or Offeror), above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract

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

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.1 REQUIRED PROVISIONS

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

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

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

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

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

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

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

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

A14 ENERGY CONSERVATION REQUIREMENTS

A14.1 CONTRACT CLAUSE

ENERGY CONSERVATION REQUIREMENTS

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

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

A15.1 MANDATORY CONTRACT CLAUSE

A15.1.1 E.E.O. Contract Clause

EQUAL OPPORTUNITY CLAUSE

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

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

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

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

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

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

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

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

A 15.1.2 EEO Specification

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:

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

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

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

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

Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11 246 or the regulations promulgated pursuant thereto.

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

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

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

- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

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

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

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

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

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

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

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

A16 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

A16.1 CONTRACT CLAUSE

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

The contractor 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 CONTRACT CLAUSE

This provision is required for all contracts that 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, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

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

A18 PROHIBITION of SEGREGATED FACILITIES

A18.1 CONTRACT CLAUSE

PROHIBITION of SEGREGATED FACILITIES

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

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

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

A19 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A19.1 CONTRACT CLAUSE

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

A20 PROCUREMENT OF RECOVERED MATERIALS

A20.1 CONTRACT CLAUSE

Procurement of Recovered Materials

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

- a) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or,

The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/epawaste/conservation/tools/cpg/products/.

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

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

A21 RIGHT TO INVENTIONS

A21.1 CONTRACT CLAUSE

RIGHTS TO INVENTIONS

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

A22 SEISMIC SAFETY

A22.1 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 CONTRACT 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 cannot comply with 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.

The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Term Definitions

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

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

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:

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

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

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

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

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

A24.1.2 Termination for Default

Termination for Default (Construction)

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

A25 TRADE RESTRICTION CERTIFICATION

A25.1 CONTRACT CLAUSE

TRADE RESTRICTION CERTIFICATION

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

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

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

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

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

- (1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R. or
- (2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or

(3) who incorporates in the public works project any product of a foreign country on such U.S.T.R. list;

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

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

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

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 U.S.C. 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

SECTION III

Special Provisions

For

**CONSTRUCT, LIGHT, AND MARK PARALLEL TAXIWAY
TO RUNWAY 36 END – SOUTH END CONNECTOR**

**ILLINOIS PROJECT: SQI-4895
S.B.G. PROJECT: 3-17-SBGP-171**

at

WHITESIDE COUNTY AIRPORT – JOSEPH H. BITTORF FIELD
STERLING/ROCK FALLS, ILLINOIS



FINAL SUBMITTAL
JANUARY 14, 2022

Prepared By:

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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 Whiteside County Airport –Joseph H. Bittorf Field, Sterling/Rock Falls, Illinois.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The “**Standard Specifications for Construction of Airports**”, State of Illinois, Department of Transportation, Division of Aeronautics, adopted September 25, 2020 shall govern the project except as otherwise noted in these Special Provisions. In the case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

Specifications may be obtained at

<http://www.idot.illinois.gov/home/resources/Manuals/Manuals-and-Guides>

Where referenced within the Special Provisions, the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction adopted April 1, 2016 shall apply.

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PART 1 – GENERAL PROVISIONS

SECTION 40 – SCOPE OF WORK

40-05 MAINTENANCE OF TRAFFIC

ADD:

- I. 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.
- m. 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.
- n. 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.
- o. 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.
- p. The contractor shall provide his own radio capable of transmitting and receiving on the Unicom frequencies noted in the plans.
- q. 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.

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

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 dome-type 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 first sentence of the second 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 first paragraph.

ADD: As the first 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 second paragraph.

ADD: As the second 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 on the construction activity plan drawings. The use of existing airfield pavements by contractor construction traffic including all haul trucks is prohibited unless previously approved by the Airport Management. Any damage to existing Airport pavement due to construction traffic operating beyond the approved work limits, hauling 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's use of existing airfield and perimeter pavements by equipment and loaded trucks shall be minimized. The Contractor shall be responsible for damage to any airfield pavement or public road caused by his construction operations. **Any damage to existing airfield, landside and perimeter pavements 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 self-propelled, 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.

ADD:

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 first sentence of the first paragraph.

ADD: As the first sentence of the first 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 first sentence of the second 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 second sentence of the eleventh (11th) 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 15th 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: Whiteside County Airport

PROJECT TITLE: Construct, Light, and Mark Parallel Taxiway to Runway 36 End – South End Connector

PROJECT NUMBERS: IL Project: SQI-4895
SBG Project: 3-17-SBGP-171

CONTRACT ITEM: (i.e. AR 110014 4” Directional Bore)

SUBMITTED BY: (Contractor/Subcontractor Name)

DATE: (Date Submitted)

ADD: To the end of the 18th 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 third 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 eleventh 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 sixth (8th) 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 sole responsibility of the Contractor to ensure the delivery of adequate and accurate documentation prior 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 sole responsibility of the Contractor to provide certification that ALL 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 REGULATIONS 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 County Division of Transportation and the City of Dixon and/or the responsible agency that maintains the roadway. The cost to 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 second paragraph as follows:

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

ADD: After the eight (8th) 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.

WHITESIDE COUNTY AIRPORT

<u>Utility Service or Facility</u>	<u>Contact (Person)</u>	<u>Contact (Phone)</u>
Ameritech – 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
Northern Illinois Gas - Gas Lines	J.U.L.I.E. (Joint Utility Locating Information for Excavators)	1-800-892-0123
FAA – Airways Facilities	Airway Facilities Manager 5701 Falcon Road Rockford, Illinois 61109	1-815-484-5300

REPLACE: paragraph eleven (11) 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 on the airport. The approximate location of existing underground cable is shown on drawings. Any airfield lights or cable that are broken and require replacement because of the Contractor's operations will be replaced by the Contractor at his/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 on 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 as 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

80-05 LIMITATION OF OPERATIONS

ADD: After the fourth (4th) 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.

80-08 DETERMINATION AND EXTENSION OF CONTRACT TIME

ADD: After the fourth 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:

<u>Month</u>	<u>Workable Calendar Days</u>
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:

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:

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 on the Airport.
4. Restrict movement of construction vehicles to construction areas as 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 on 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 shall monitor the gate to prevent unauthorized entries.
7. The contractor shall provide his own padlock to secure the gate used for access.

PART 2 – GENERAL CONSTRUCTION ITEMS

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

102-2.1

ADD:

All materials for this item shall meet the requirements of the Buy American Preference as stated in the Appendix 4. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Required by State and/or Federal Law, Buy American Certificate and the contractor shall provide material certifications including ASTM testing standards to the Resident Engineer before any material is placed.

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

As part of this item, the Contractor shall be required to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for construction site activities. Information on the above-referenced permits may be obtained from:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

METHOD OF MEASUREMENT

DELETE: Sections 102-4.1 thru 102-4.7 and 102-4.9.

ADD: The following section:

102-4.12

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

BASIS OF PAYMENT

102-5.1

Payment will be made under:

ITEM AR156520 INLET PROTECTION – PER EACH.

ITEM 105 – MOBILIZATION

DESCRIPTION

150-1.1

REVISE the third 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 original condition.

BASIS OF PAYMENT

105-3.1

ADD:

Payment will be made under:

ITEM AR150520 MOBILIZATION – PER LUMP SUM.

PART 3 – SITEWORK

ITEM 101 – PREPARATION/REMOVAL OF EXISTING PAVEMENTS

CONSTRUCTION

101-3.1 (b)

ADD:

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.**

METHOD OF MEASUREMENT

101-4.1

ADD:

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

BASIS OF PAYMENT

101-5.1

ADD:

Payment will be made under:

ITEM AR401900 REMOVE BITUMINOUS PAVEMENT – PER SQUARE YARD.

ITEM 152 – EXCAVATION, SUBGRADE AND EMBANKMENT

DESCRIPTION

152-1.2 DIGITAL TERRAIN MODEL

DELETE: This section and replace with the following:

The cross sections and grading information shown in the bid set plans shall be the line and grade for control of the grading 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.

152-1.2 CLASSIFICATION

DELETE: Paragraphs b, c, d and e.

ADD:

f. **Topsoil Stripping.** Topsoil stripping shall consist of stripping the existing topsoil from below the proposed embankments or below the proposed airfield, roadway and shoulder pavements. For the purpose of this specification, topsoil shall consist of the material consisting of brush, sods, grass, decayed vegetable matter, or vegetation approximately eight inches (8") in depth. Topsoil stripping shall be defined as "Unclassified Excavation".

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 as required, and in compliance with applicable laws, prior to offsite disposal of all materials. These costs 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 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 additional 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 (a)

REVISE:

Blasting will not be permitted.

152-3.2 EXCAVATION

ADD:

The Contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize the 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.

152-3.6 PREPARATION OF EMBANKMENT AREA

ADD: After the first paragraph:

Prior to placing embankment for new pavements, the topsoil as defined in Section 152-3.15 shall be stripped and stockpiled for future use.

Compressible and/or organic materials shall be removed down to dense material as directed by the Resident Engineer and replaced with suitable embankment material.

Materials excavated during the stripping process shall not be utilized as embankment under the proposed or future pavements.

Materials excavated during the stripping process shall be stockpiled at a location designated by the Contractor and approved by the Resident Engineer outside of the grading limits and allowed to decay and at the Contractor's expense. Upon completion of the earthwork, this material shall be incorporated as directed in Item 905 over the disturbed surface. Excavation, stockpiling and incorporation of this material shall not be measured for payment but shall be considered incidental to Item 152.

152-3.8 FORMATION OF EMBANKMENTS

ADD:

The Contractor shall make provisions in the work to maintain positive drainage from the work areas and to minimize the 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.

ADD: After the eighth paragraph:

Compaction control tests for aircraft weights of less than 60,000 pounds (ASTM D698 – Standard Proctor) shall apply in the areas below proposed airfield pavements.

152-3.15 TOPSOIL

DELETE: 2nd paragraph of this section and REPLACE with the following:

The Contractor shall strip the vegetation from all proposed excavation areas at a minimum depth of 4" and from below all proposed pavement areas at a depth of 4". The stripped organic material shall be temporarily stockpiled outside the grading limits. After the embankment is placed the decomposed vegetative shall be re-spread and disturbed areas shall be prepared for seeding.

In the area directly below the proposed pavement structure, the Contractor shall strip the topsoil and shall store this material on site. Except where noted in the plans, this excavated material shall be replaced with select fill material and compacted to the specifications of Item 152 for Aircraft weighing less than 60,000 lbs.

Materials excavated during the stripping process shall not be utilized as embankment under the proposed or future pavements.

Materials excavated during the stripping process shall be temporarily stockpiled at a location designated by the Contractor and approved by the Resident Engineer outside of the grading limits and allowed to decay. Upon completion of the earthwork, this material shall be incorporated as directed in Item 905 over the disturbed surface. Excavation, stockpiling and incorporation of this material shall not be measured for payment but shall be considered incidental to Item 152.

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 applying water to control dust resulting from construction operations and is not intended for use in compaction of earth embankment. The Contractor shall take measures to control dust.

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

Dust control watering shall not be paid for separately but shall be considered incidental to the item requiring the dust control.

METHOD OF MEASUREMENT

152-4.1

DELETE: 1st paragraph and replace with:

Prior to beginning any work, the Contractor shall verify all earthwork quantities shown in the contract documents are in agreement with the earthwork quantities from their own calculations. Existing grades on the design cross sections, where they do not match the locations of actual spot elevations shown on the plans, were developed by computer interpolation from those spot elevations. Contractor shall recognize that, due to the interpolation process, the actual ground surface at any particular location may differ somewhat from the interpolated surface shown on the design cross sections. If the Contractor, based upon his own investigation to verify the topography, identifies discrepancies in the design cross sections, he shall notify the Resident Engineer in writing at least two weeks prior to disturbing the existing grade. Disturbance of existing grade in any area shall constitute acceptance by the Contractor of the accuracy of the elevations depicted in the contract documents.

Measurement for payment specified by the cubic yard shall be computed by the average end areas of design cross sections. The end area is that bound by the original ground line established by field cross-sections and the final theoretical pay line established by cross-sections shown on the plans, subject to verification by the Resident Engineer.

REVISE: Last sentence of 2nd paragraph to read:

If a discrepancy in plan quantity is discovered after the work has been started, an appropriate adjustment will be made.

152-4.2

REVISE: 1st sentence to read:

For payment specified by the cubic yard, measurement for all excavation or embankment shall be computed by the average end area of design cross sections.

152-4.4

DELETE: This section.

152-4.5

REVISE: This section to read.

Offsite 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.

152-4.7

ADD:

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

152-4.8

ADD:

The quantity of topsoil stripping shall be measured and paid for as "Unclassified Excavation".

BASIS OF PAYMENT

152-5.1

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".

These prices shall be full compensation for all scarification, excavation, stockpiling, hauling, grading, final shaping, and compacting necessary to construct the proposed embankments in conformance with

the lines and grades shown in the plans, and for all labor, equipment, tools and incidentals necessary to complete this item.

Payment will be made under:

ITEM AR152410 UNCLASSIFIED EXCAVATION - PER CUBIC YARD.

ITEM AR156513 SEPARATION FABRIC – PER SQUARE YARD.

ITEM 154 – SUBBASE COURSE

DESCRIPTION

154-1.1

ADD:

This work shall consist of furnishing and placing subbase course as the field conditions warrant at the time of construction. This material is intended to repair soft subgrade as determined by the Resident Engineer based on results of geotechnical testing and/or proof roll. No adjustment in unit price will be allowed for an increase or decrease in quantities. **Excavation of the soft subgrade shall not be paid for under Item 154 but shall be paid under Item 152 Excavation, Subgrade and Embankment.**

MATERIALS

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 ½ 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 COMPACTION

DELETE: This section.

ADD:

Rolling the top of this replacement materials 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. The subbase course shall be compacted to the satisfaction of the Resident Engineer.

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

154-4.1

DELETE: This section.

ADD:

The quantity of Subbase Course shall be the number of cubic yards as measured by the Resident Engineer at the specified thickness of the material placed. If required, the thickness of subbase course measured for payment will include the thickness of the capping stone.

The subbase course shall be used as shown and as field conditions warrant at the time of construction. No adjustment in unit price will be allowed for increase or decrease in quantities.

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

152-5.1

DELETE: This Section.

ADD:

Subbase course shall be paid for at the contract unit price per cubic yard, of which price shall be full compensation for the two (2) inch capping stone (if necessary), furnishing, spreading, compacting, watering and all incidentals related to equipment, labor and tools necessary to complete this work.

Payment will be made under:

ITEM AR208515 POROUS GRANULAR EMBANKMENT – PER CUBIC YARD.

PART 4 – BASE COURSES

ITEM 209 – CRUSHED AGGREGATE BASE COURSE

MATERIALS

209-2.1

DELETE: Paragraph B; Crushed Gravel

CONSTRUCTION METHODS

209-3.9 ACCEPTANCE SAMPLING AND TESTING (a)

REVISE: 1st sentence of 2nd 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

209-5.1

ADD:

Payment will be made under:

ITEM AR209612 CRUSHED AGG. BASE COURSE - 12" – PER SQUARE YARD.

PART 6 – FLEXIBLE PAVEMENTS

ITEM 401 – ASPHALT MIX PAVEMENT SURFACE COURSE

DESCRIPTION

401-1.1

ADD:

This item shall consist of placing asphalt surface course (per Method 1), placed as part of the proposed pavement structure at the locations shown on the plans.

MATERIALS

401-2.3 ASPHALT BINDER

ADD: The following after the 6th paragraph of this section:

Asphalt Binder Selection Table – IDOT Districts 1-6 (Runway & Taxiway) criteria shall apply.

COMPOSITION

401-3.3 JOB MIX FORMULA (JMF)

ADD: The following after the 6th paragraph of this section:

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

CONSTRUCTION METHODS

401-4.10 JOINTS

ADD:

After the first paragraph of this section.

At any time during the asphalt 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 a liquid asphalt and this work shall be considered incidental to Item 401, Asphalt Surface Course, and no additional compensation will be allowed.

BASIS OF PAYMENT

401-8.1

ADD:

Payment will be made under:

ITEM AR401611 BIT. SURFACE COURSE - METHOD 1 – PER TON.

ITEM 403 – ASPHALT MIX PAVEMENT BASE COURSE

DESCRIPTION

403-1.1

ADD:

This item shall consist of placing asphalt base course (per Method 1), placed as part of the proposed pavement structure at the locations shown on the plans.

MATERIALS

401-2.3 ASPHALT BINDER

ADD: The following after the 6th paragraph of this section:

Asphalt Binder Selection Table – IDOT Districts 1-6 (Runway & Taxiway) criteria shall apply.

COMPOSITION

403-3.3 JOB MIX FORMULA (JMF)

ADD: The following after the 6th paragraph of this section:

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

CONSTRUCTION METHODS

403-4.10 JOINTS

ADD:

After the first paragraph of this section.

At any time during the asphalt 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 a liquid asphalt and this work shall be considered incidental to Item 403, Asphalt Base Course, and no additional compensation will be allowed.

BASIS OF PAYMENT

403-8.1

ADD:

Payment will be made under:

ITEM AR403611 BIT. BASE COURSE - METHOD 1 – PER TON.

PART 9 – MISCELLANEOUS

ITEM 602 – EMULSIFIED ASPHALT PRIME COAT

DESCRIPTION

602-1.1

ADD:

This item shall consist of placing emulsified asphalt prime coat on the proposed aggregate base as part of the proposed pavement structure at the locations shown on the plans.

BASIS OF PAYMENT

602-5.1

ADD:

Payment will be made under:

ITEM AR602510 BITUMINOUS PRIME COAT – PER GALLON.

ITEM 603 – EMULSIFIED ASPHALT TACK COAT

DESCRIPTION

603-1.1

ADD:

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

BASIS OF PAYMENT

603-5.1

ADD:

Payment will be made under:

ITEM AR603510 BITUMINOUS TACK COAT – PER GALLON.

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:

Epoxy, Methacrylate, Solvent-Base and Preformed Thermoplastic

METHOD OF MEASUREMENT

620-4.1

ADD:

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.

Black border shall not require reflective media.

BASIS OF PAYMENT

ADD:

Payment will be made under:

ITEM AR620520 PAVEMENT MARKING - WATERBORNE – PER SQUARE FOOT.

ITEM AR620525 PAVEMENT MARKING - BLACK BORDER – PER SQUARE FOOT.

PART 11 – DRAINAGE

ITEM 701 – PIPE FOR STORM DRAINS AND CULVERTS

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

701-5.1

ADD:

Payment will be made under:

ITEM AR701006	6” PVC STORM SEWER – PER FOOT.
ITEM AR701512	12” RCP, CLASS IV – PER FOOT.
ITEM AR701515	15” RCP, CLASS IV – PER FOOT.
ITEM AR701900	REMOVE PIPE – PER FOOT.

ITEM 751 – MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES

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:

751-3.12 MANHOLE ADJUSTMENT

ADD:

Adjustment of existing manhole shall as detailed in the plans. Excavation necessary to adjust manhole shall be considered incidental to the pay item.

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

METHOD OF MEASUREMENT

751-4.1

REVISE: Sentence to read:

The quantity of manholes, catch basins, inlets, inspection holes, manhole adjustments and removal of manholes shall be measured for payment by the number of each unit installed as specified, completed, and accepted by the Resident Engineer.

BASIS OF PAYMENT

751-5.1

ADD:

Payment will be made under:

ITEM AR751411	INLET - TYPE A – PER EACH.
ITEM AR751540	MANHOLE 4’ – PER EACH.
ITEM AR751903	REMOVE MANHOLE – PER EACH.
ITEM AR751943	ADJUST MANHOLE – PER EACH.

PART 12 – TURFING

ITEM 901 – SEEDING

DESCRIPTION

901-1.1

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 access roads, haul roads, staging areas, and storage areas) shall be considered incidental to the contract.

MATERIALS

901-2.2 LIME

DELETE: Entire Section.

ADD:

The Contractor has the option to perform a soil test, at their expense, for the on-site or plan specified topsoil sources. If the Contractor proposes an application of lime, the proposal shall be approved by the Engineer. Lime, if used, shall be at no additional costs to the contract.

901-2.3 FERTILIZER

DELETE: The last paragraph and the fertilizer rate table.

ADD:

Fertilizer shall be applied at rates that supply the following amounts of nutrients per acre to the distributed areas of seeding:

<u>NUTRIENTS</u>	<u>POUNDS PER ACRE</u>
Nitrogen Fertilizer Nutrients	90
Phosphorus Fertilizer Nutrients	90
Potassium Fertilizer Nutrients	<u>90</u>
TOTAL	270

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

901-5.1

ADD:

Payment will be made under:

ITEM AR901510 SEEDING – PER ACRE.

ITEM 908 – MULCHING

DESCRIPTION

908-1.1

ADD:

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

908-2.1 MULCH MATERIAL

REVISE: First sentence to read:

Material used for mulching shall be (D) Hydraulic Mulch – Heavy Duty.

CONSTRUCTION

908-2.1 MULCHING

ADD:

Chemical mulch binder shall be mixed and applied per the manufacturer's recommendations.

BASIS OF PAYMENT

908-5.1

ADD:

Chemical mulch binder shall not be paid for separately, but shall be included in the unit bid price for mulching.

Payment will be made under:

ITEM AR908515 HEAVY-DUTY HYDRAULIC MULCH – PER ACRE.

PART 13 – LIGHTING INSTALLATION

ITEM 108 – UNDERGROUND POWER CABLE FOR AIRPORTS

DESCRIPTION

108-1.1

DELETE: The 3rd sentence of the first paragraph.

ADD:

This item of work shall consist of the underground installation of 5000V cables in unit duct, conduit or duct bank at the locations shown on the plans and in accordance with these specifications. When crossing existing utilities or as required by the Engineer, the Contractor shall hand dig the trenches for the proposed cables.

Contractor shall color code all airfield lighting cables in ducts, manholes and handholes as directed by the Engineer. All costs of color-coding shall be considered incidental to the contract unit price for the associated item.

EQUIPMENT AND MATERIALS

108-2.2 CABLE

ADD:

Airfield Lighting cable under this item shall be:

- 1/C #8, 5KV, L-824 TYPE C in 3/4" unit duct.
- 2 #4 XLP-USE, 1 #8 GND., L-824 TYPE C in 1-1/4" unit duct.

108-2.4 CABLE CONNECTIONS

DELETE: The first and second sentence of paragraph **d. The Taped or Heat-Shrank splice.**

ADD:

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

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

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

In line connections for existing cables to be spliced or those which are cut during construction shall be repaired with the cast splice kit. The Contractor shall have a minimum of five (5) splice kits on the jobsite at all times for emergency repairs. Splice markers shall be installed over each splice in cables not to

be abandoned. Cast splice kits shall be as specified in paragraph (a). All field splices shall be covered with a flexible polyolefin heat-shrinkable sleeve.

ADD:

108-2.13 BUY AMERICAN CERTIFICATIONS AND WAIVERS

All materials for this item shall meet the requirements of the Buy American Preference as stated in 49 U.S.C. § 50101. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Required by State and/or Federal Law, Buy American Certificate and the contractor shall provide material certifications including ASTM testing standards to the Resident Engineer before any material is placed.

CONSTRUCTION METHODS

108-3.1 GENERAL

ADD:

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

108-3.2 INSTALLATION IN DUCT OR CONDUIT

ADD:

The Contractor shall install conduit in trench between the lights and signs as shown in the plans.

The Contractor shall coordinate the cable trenching, placement and backfilling operations so that the cable will not be damaged by (a) the use of mechanized road building equipment in the area where underground cable is or will be in existence, and (b) stone or other foreign materials falling into the trench or mixing into the trench backfill materials.

Contractor shall provide a minimum of one loop of cable in all manholes, handholes and light bases.

108-3.3 (a) TRENCHING

REVISE 24" to 30" in the last sentence of the first paragraph.

ADD:

Restoration to disturbed areas shall be completed for all methods of installation to the satisfaction of the Engineer. Payment for restoration work shall be considered incidental to the associated pay items.

108-3.5 SPLICING

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

ADD:

Contractor shall use cast splicing kits as described in Article 108-2.4 for any splices made inside the electric handholes and manholes. The cast splicing kit shall be series 82-B1 Scotch cast or 90-B1 Scotch cast as manufactured by 3M or equal. Contractor shall provide shop drawing for splicing method

and cast splicing kit. Contractor shall also leave minimum 30" of slack on each side of the cable being spliced.

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

Contractor may elect to install FAA approved "Complete Kit" or "Super Kit" with sealant and rubber boot in lieu of heat shrink connectors at no additional cost to the contract.

108-3.11 LOCATING OF EXISTING CABLES

ADD:

Contact Personnel are listed in Section 70-17 herein.

METHOD OF MEASUREMENT

108-4.1

REVISE: This Section to read as follows:

No measurement for payment will be made for trenching, excavation, backfill, dewatering and restoration regardless of the type of material encountered shall be included in the unit price bid for the work.

ADD:

The cost of removing cable as directed by the Owner to make way for new cable shall not be measured separately for payment, but shall be considered incidental to the unit bid price for the cable.

The cost of routing the cable through duct, splicing, marking, trenching, backfilling, and all connections shall be included in the unit price bid for the cable.

Temporary cable connections/jumper cables will not be measured for payment.

BASIS OF PAYMENT

108-5.1

REVISE: This Section to read as follows:

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

Topsoil and seeding of the trench shall not be paid for separately but shall be considered incidental to the associated pay item.

Payment will be made under:

ITEM AR108158 1/C #8 5KV UG CABLE IN UD – PER FOOT.

ITEM AR800872 2 #4 XLP-USE 600V, 1 #8 GND IN 1-1/4" UD – PER FOOT.

ITEM 110 – AIRPORT UNDERGROUND ELECTRICAL DUCT BANKS AND CONDUITS

DESCRIPTION

110-1.1

ADD:

This item shall consist of the construction of new direct bury 3" steel duct, new PVC Schedule 40 concrete encased duct banks and new PVC Schedule 80 directionally bored conduits including appropriate duct markers in pavement at the locations shown in the plans or as directed by the Engineer.

Trenching and backfilling for the conduit shall not be paid for separately, but shall be considered incidental to the associated item. Contractor shall provide pull wire for each conduit at no cost to the contract.

EQUIPMENT AND MATERIALS

110-2.2 STEEL CONDUIT

ADD:

Steel conduit shall be of the size and shape as detailed in the plans.

110-2.3 PLASTIC CONDUIT

ADD:

Conduit shall be Schedule 40 and 80 where indicated in the plans. In general, Schedule 40 PVC conduit is required for concrete encased duct banks and Schedule 80 PVC conduit for directionally bored conduits.

110-2.11 BUY AMERICAN CERTIFICATIONS AND WAIVERS

All materials for this item shall meet the requirements of the Buy American Preference as stated in 49 U.S.C. § 50101. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Required by State and/or Federal Law, Buy American Certificate and the contractor shall provide material certifications including ASTM testing standards to the Resident Engineer before any material is placed.

CONSTRUCTION METHODS

110-3.4 DUCT MARKER

ADD:

The Contractor shall provide duct markers for each new or existing duct being used as detailed in the plans. The cost of installation of the duct markers shall be incidental to the appropriate pay item.

110-3.5 BACKFILLING FOR CONDUITS

ADD:

Crushed aggregate material conforming to the requirements of Item 209 or as approved by the Engineer shall be used for backfill at the pavement crossings for the proposed duct installation. In lieu of aggregate, the Contractor may substitute controlled low strength material (CLSM) backfill for those areas requiring aggregate backfill. This substitution must be approved in writing prior to construction and must be completed at no additional cost to the contract. CLSM shall meet the Item 153. The CLSM material will be considered incidental to the associated duct item.

110-3.6 BACKFILLING FOR DUCT BANKS

ADD:

Crushed aggregate material conforming to the requirements of Item 209 or as approved by the Engineer shall be used for backfill at the pavement crossings for the proposed duct installation. In lieu of aggregate, the Contractor may substitute controlled low strength material (CLSM) backfill for those areas requiring aggregate backfill. This substitution must be approved in writing prior to construction and must be completed at no additional cost to the contract. CLSM shall meet the Item 153. The CLSM material will be considered incidental to the associated duct item.

BASIS OF PAYMENT

110-5.1

DELETE: Entire Section.

ADD:

Payment will be made at the contract unit price per lineal foot for each pay item completed and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, aggregate backfill, backfill, compaction, duct markers, pull rope/wire, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete these items as specified herein.

Restoration, topsoiling, seeding, and mulching of the duct and conduit trench shall not be paid for separately but shall be considered incidental to the associated work item.

Payment will be made under:

- ITEM AR110014 4" DIRECTIONAL BORE – PER FOOT.**
- ITEM AR110213 3" STEEL DUCT, DIRECT BURY – PER FOOT.**
- ITEM AR110502 2-WAY CONCRETE ENCASED DUCT – PER FOOT**

ITEM 125 – INSTALLATION OF AIRPORT LIGHTING SYSTEMS

DESCRIPTION

125-1.1

ADD:

Airfield lighting improvements shall include:

- Removal of existing stake mounted lights
- Removal of existing base mounted lights
- Removal of existing Airfield Guidance Signage
- New stake mounted Medium Intensity Taxiway Lights – LED
- New base mounted Medium Intensity Taxiway Lights – LED
- New in-pavement High Intensity Runway Light
- Installation of proposed LED Airfield Guidance Signage

EQUIPMENT AND MATERIALS

125-2.1 GENERAL

ADD:

- (g) After submittals have been approved by the Engineer and prior to installation, the Contractor shall assemble the equipment and materials at a single location, on-site, and request inspection by the Engineer. None of the equipment or materials, other than duct or conduit, may be used on the job until such as inspection has been completed.

125-2.8 RUNWAY AND TAXIWAY LIGHTS (d)

ADD:

Lenses for the new in-pavement runway light shall be 180° amber/180° clear and for the taxiway lights lenses shall be blue.

125-2.9 RUNWAY AND TAXIWAY GUIDANCE SIGNS

ADD:

Signs connected to Runway 7/25 edge light circuits shall be Style 3 (5-Step) unless otherwise noted on the Plans. Signs connected to the Runway 18/36 and all taxiway edge light circuits shall be Style 2 (3-Step).

For the purposes of this specification, a character shall be defined as a letter, numeral, dot, dash or arrow to be indicated on the sign nomenclature. Sign components and lengths shall be as recommended by the manufacturer.

ADD:

125-2.16 BUY AMERICAN CERTIFICATIONS AND WAIVERS

All materials for this item shall meet the requirements of the Buy American Preference as stated in 49 U.S.C. § 50101. Contractor shall provide proof of 100% domestic materials prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Required by State and/or Federal Law, Buy American Certificate and the contractor shall provide material certifications including ASTM testing standards to the Resident Engineer before any material is placed.

CONSTRUCTION METHODS

125-3.1 INSTALLATION

ADD:

The Contractor shall exercise caution in the adjustment of all light units. Any units damaged by the Contractor's operations shall be repaired or replaced to the satisfaction of the Resident Engineer at no additional cost to the contract.

125-3.2 TESTING

DELETE: Entire Section.

ADD:

VISUAL EXAMINATION

The most important of all inspection and test procedures is thorough visual inspections. Visual inspections shall be made frequently during installation, at completion of installation, and before energizing the circuits. A careful visual inspection can reveal defects that can be corrected prior to acceptance tests and energization. Serious damage may occur if defects are subjected to electrical tests or energization. Visual inspections shall include appraisal of:

- (a) Correctness of external connections.
- (b) Good work performance.
- (c) Cleanliness.
- (d) Safety hazards.
- (e) Specific requirements listed herein for individual items. While all equipment manufactured under specifications pass strict factory tests prior to shipment, it shall be inspected for shipping damage immediately upon receipt.

ELECTRICAL TESTS ON SERIES LIGHTING CIRCUITS

Before modifying any series circuit, verify the performance of the existing circuit by checking the supply voltage to the regulator and measuring the output current from the regulator on all brightness steps under existing load.

- (a) For home run segments that will not be replaced, disconnect at S-1 cutout and at first fixture and verify cable continuity.
- (b) Check cable connections and perform electrical tests on cable as specified in Section 108.

LIGHTING FIXTURES

An inspection shall be made to determine that the color, quantity, and locations of lights are in accordance with the installation drawings. Each light shall be inspected to determine that it is operable, glass is not broken or cracked, correct lamps are installed, and it has been properly leveled and aimed, in accordance with technical orders and manufacturer's instructions, where applicable.

FINAL ACCEPTANCE TESTS

After components and circuits have been inspected, as specified in the preceding paragraphs, the entire system shall be inspected and tested as follows:

- (a) Operate each switch for the modified lighting circuits from the remote control position (ATCT) so that each switch position is reached at least twice. During this process, all lights and vault equipment shall be observed to determine that each switch properly controls the corresponding circuit.
- (b) Repeat the above test using the local control switches on the regulators.
- (c) Each lighting circuit shall be tested by operating it continuously at maximum brightness for at least 6 hours. Visual inspection shall be made at the beginning and end of this test to determine that the correct numbers of lights are operating at full brightness. Dimming of some or all of the lights in a circuit is an indication of grounded cables.
- (d) In addition to the above, all equipment shall be subjected to any and all performance tests specified in the manufacturer's instructions.
- (e) Photometric testing. The Airport may, upon completion of the lighting installation and as part of acceptance testing, perform field photometric testing of each new light fixture to assure the installed runway lights meet the photometric requirements specified by FAA. The test results will be recorded and furnished to the Contractor, with any noted deficiencies. The Contractor is responsible for correcting any deficiencies at no additional cost to the Owner. The Contractor shall furnish spares in support of this testing, to include 15% lamps and 5% lenses for the new in-pavement lights. Spares not used shall be provided to the Airport upon completion of the work.
- (f) Perform grounding resistance test for each ground rod to achieve 25 ohms(max) resistance requirements.

All test results from required tests shall be submitted to the Engineer for review and approval.

125-3.4 ELEVATED AND IN-PAVEMENT LIGHTS

ADD:

New fixtures shall meet current FAA requirements and be listed on the FAA Advisory Circular list of equipment approved for use on an airport. The new lights shall utilize transformers of the size recommended by the manufacturer to provide the luminance standards according to AC 150/5345-46 (latest edition) "Specification for Runway and Taxiway Light Fixtures" and FAA Engineering Brief No. 67C (LED's). The associated LED fixtures shall be ETL certified. The fixtures shall use robust, solid-state internal devices that withstand damage if the fixture is knocked over.

1. New elevated base mounted light fixtures installed on new concrete bases shall include the concrete encased light can, transformer, support, light fixture, stems, frangible coupling, grounding system, base plate(s) and L-823 connectors, light identification tag, brick, and any other materials necessary to make the unit operational and shall be installed at the locations as shown on the plans.

2. New elevated stake mounted light fixtures installed on new stake bases shall include the transformer, support, light fixture, stems, frangible coupling, grounding system, and L-823 connectors, light identification tag, and any other materials necessary to make the unit operational and shall be installed at the locations as shown on the plans.
3. New in-pavement light fixture installed on new concrete base shall include the concrete encased light can, light can extension, transformer, support, light fixture, rings, grounding system, base plate(s) and L-823 connectors, light identification tag, brick, and any other materials necessary to make the unit operational and shall be installed at the locations as shown on the plans.

All disturbed areas shall be backfilled and compacted to the approval of the Engineer. Restoration shall be incidental and in accordance with Sections 102, 152, 901, 905. If conduits are present, assure adequate access to the conduit is maintained for the construction phase of the project until the conduit is connected into the new system.

125-3.5 TAXI GUIDANCE SIGN REMOVAL AND INSTALLATION

ADD:

Airfield guidance signs as denoted for removal shall be removed with care as to not damage the units. The Contractor shall give the Owner right of first refusal in the material removed. If the Owner deems that the removed units are to be salvaged than the Contractor shall deliver them to a location on the Airport as specified by the Owner. If the units are not desired by the Owner, the Contractor shall remove and dispose of them at a location off Airport property at no additional cost to the contract. The removal shall consist of the complete sign unit including base cans and foundations. Conduits entering into the sign shall be cut unless the cable is designated for re-use in connection with a new sign.

The Contractor shall install a new LED sign with internal LED Lighting components, new cable between the sign and transformer, new isolation transformer, new connectors with heat shrink, and new ground rod and grounding to the new concrete foundation, base can, and conduit and all necessary labor, equipment, tools, materials, and incidentals necessary to complete this item as shown on the plans and within these specs.

All disturbed areas shall be backfilled and compacted to the approval of the Engineer. Restoration shall be incidental and in accordance with Sections 102, 152, 901, 905. If conduits are present, assure adequate access to the conduit is maintained for the construction phase of the project until the conduit is connected into the new system.

125-3.6 LIGHT REMOVALS

ADD:

Existing light fixtures, transformers, stakes, and bases shall be completely removed where noted on the Plans and disposed of by the Contractor off Airport property. The excavations shall be backfilled compacted per the requirements of sections 102, 152, 901, 905. Restoration shall be incidental to the removal. The cable associated with light removal shall be removed from the conduit/unit duct and the conduit/unit duct shall be abandoned in place.

Airfield light fixtures as denoted for removal shall be removed with care as to not damage the units. The Contractor shall give the Owner right of first refusal in the material removed. If the Owner deems that the removed units are to be salvaged than the Contractor shall deliver them to a location on the Airport as specified by the Owner. If the units are not desired by the Owner, the Contractor shall remove and dispose of them at a location off Airport property at no additional cost to the contract.

All disturbed areas shall be backfilled and compacted to the approval of the Engineer. Restoration shall be incidental and in accordance with Sections 102, 152, 901, 905.

125-3.6 PHASING AND INTERRUPTIONS

ADD:

All existing electrical equipment and lighting systems not included in the phase of work being performed must be kept in operation, unless prior approval of the Owner has been received and as otherwise specified below and on the Drawings. The Contractor may use salvaged materials for temporary construction where required. The permission for temporary work and using salvaged materials shall be obtained from the Owner. Lighting for active runway and taxiway surfaces shall be maintained. Work shall be coordinated with paving operations, when applicable.

Refer to the special provision of the specification for notification requirements and other information regarding work interruptions due to airport operational requirements or Contractor anticipation for exceeding the limitations described in the above paragraph.

METHOD OF MEASUREMENT

125-4.1

ADD:

The quantities to be paid for under this item shall consist of:

- (a) The number of existing stake or base mounted lights completely removed, disposed of and accepted by the Engineer. Restoration of the removal area shall be incidental to the removal.
- (b) The number of existing taxiway guidance signs completely removed, disposed of and accepted by the Engineer. Restoration of the removal area shall be incidental to the removal.
- (c) The number of stake or base mounted light fixtures installed in place as complete units, ready for operation and accepted by the Engineer.
- (d) The number of new taxi guidance signs installed in place as complete units, ready for operation and accepted by the Engineer. The cost of any embankment, topsoil, grading, ground wire or ground rod installation shall be incidental to the respective pay item.
- (e) The number of in-pavement light fixtures installed in place as complete units, ready for operation and accepted by the Engineer.

BASIS OF PAYMENT

125-5.1

ADD:

Payment will be made at the contract unit price for each complete item furnished and installed in place 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, and for all labor, equipment, tools and incidentals necessary to complete this item.

The contract unit price per each item removed by the Contractor and accepted by the Engineer. This price shall be full compensation for furnishing all materials, excavation, backfill, compaction and disposal and for all labor, equipment and tools necessary to complete this item to the satisfaction of the Engineer.

Payment for grounding of airfield lights and signs, including ground rods, ground wire and all connections shall not be paid for separately but shall be considered incidental to the associated pay item.

Payment will be made under:

- ITEM AR125411 MITL-STAKE MOUNTED-LED – PER EACH.**
- ITEM AR125416 MITL-BASE MOUNTED-LED – PER EACH.**
- ITEM AR125442 TAXI GUIDANCE SIGN, 2 CHARACTER – PER EACH.**
- ITEM AR125445 TAXI GUIDANCE SIGN, 5 CHARACTER – PER EACH.**
- ITEM AR125446 TAXI GUIDANCE SIGN, 6 CHARACTER – PER EACH.**
- ITEM AR125525 HIRL, IMPAVEMENT – PER EACH.**
- ITEM AR125901 REMOVE STAKE MOUNTED LIGHT – PER EACH.**
- ITEM AR125902 REMOVE BASE MOUNTED LIGHT – PER EACH.**
- ITEM AR125904 REMOVE TAXI GUIDANCE SIGN – PER EACH.**

IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA

State of Illinois
Department of Transportation
Bureau of Materials
Springfield

POLICY MEMORANDUM

Revised: December 4, 2018

11-08.6

This Policy Memorandum supersedes number 11-08.5 dated July 24, 2018

TO: REGIONAL ENGINEERS AND BUREAU CHIEFS IN THE OFFICE OF HIGHWAYS
PROJECT IMPLEMENTATION

SUBJECT: AGGREGATE GRADATION CONTROL SYSTEM (AGCS)

1.0 SCOPE

This program shall apply to all Sources that supply certified aggregate for uses identified in this program to projects let under the jurisdiction of the Illinois Department of Transportation (includes local agency projects with state/federal funding). All aggregate shipped for program-designated uses on these projects shall be from a Certified Source.

2.0 PURPOSE

- 2.1 To establish a procedure of certification whereby Sources shall supply aggregate for designated use meeting test properties cited by the Bureau.
- 2.2 To set forth the conditions for Source certification and revocation of certification.

3.0 DEFINITIONS

- 3.1 **AGCS Technician** - A technician at the Source who has successfully completed the Department's AGCS Technician Course. The AGCS training course is no longer available; however, there are still individuals that hold this title. This individual may perform all duties of the Aggregate Technician under the Gradation Control Program except gradation testing. Gradation testing (including splitting) must be performed by an Aggregate Technician or a Mixture Aggregate Technician.
- 3.2 **Aggregate Inspector** - District materials inspector who has successfully completed the Department's Aggregate Technician Course and is responsible for inspection at an aggregate Source. A Consultant, hired by the Department to perform the duties of an Aggregate Inspector, shall not be allowed to take any quality or Freeze-Thaw samples at an aggregate source.
- 3.3 **Aggregate Technician** - Sampling and testing technician at the Source who has successfully completed the Department's Aggregate Technician Course and is responsible for the Gradation Control Program at the Source. The Aggregate Technician course (CET 021) is a 5-day course, offered as a part of the IDOT Quality Management Training Program administered through Lake Land College in Mattoon, IL.
<https://www.lakelandcollege.edu/idot-quality-management-training-program/>

- 3.4 **Bureau** - The Central Bureau of Materials, of the Illinois Department of Transportation, located in Springfield, Illinois.
- 3.5 **Department** - Illinois Department of Transportation.
- 3.6 **District** - Materials Office located at each Illinois Department of Transportation highway district office.
- 3.7 **Failing Gradation Sample** - A gradation sample which, when tested, exceeds the established Master Band on the critical sieve and/or exceeds the specification ranges on the other sieves for that gradation.
- 3.8 **Gradation Technician** - A technician who has successfully completed the Department's Gradation Technician Course and is responsible only for splitting and testing gradation samples. The Gradation Technician shall be monitored on a daily basis by the Aggregate Technician. To become a Gradation Technician, contact the local IDOT Aggregate Inspector. The Gradation Technician Course is a ½ day course that is taught by IDOT District personnel and is not administered by Lake Land College.
- 3.9 **Mechanical Blending** – Blending for gradation or of different types of materials shall be through interlocked feeders or a blending plant such that the prescribed blending percentage is maintained throughout the blending process.
- 3.10 **Mixture Aggregate Technician** - A technician who has successfully completed the Department's Mixture Aggregate Technician course (CET 020) and is responsible only for gradation sampling and gradation testing. The Mixture Aggregate Technician course (CET 020) is a 3-day course, offered as a part of the IDOT Quality Management Training Program administered through Lake Land College in Mattoon, IL.
<https://www.lakelandcollege.edu/idot-quality-management-training-program/>
- 3.11 **Monitor Sample** - Gradation sample taken from the Source, Terminal, Supplier Yard, or mix plant and tested by the Department to monitor the gradation being produced by the Source under its Gradation Control Program. This sample shall also be used to evaluate the adequacy of procedures and equipment used by the Source in its Gradation Control Program.
- 3.12 **Outlying (OS) Source** – A certified aggregate source located out-of-state which is specifically designated by the inspecting District and the Bureau and required to follow the requirements listed in Section 8.0 herein.
- 3.13 **Qualified Products List (QPL)** – An approved or Qualified Aggregate Source List maintained by the Department identifying aggregate sources certified to supply aggregate to Department/Local Agency projects.
- 3.14 **Quality Control (QC) Manager** - The Aggregate Technician or the AGCS Technician designated by the Source who shall be responsible for compliance with the requirements of the Aggregate Gradation Control System. The QC Manager shall have successfully completed the Department's Aggregate Technician Course or the AGCS Technician Course.

- 3.15 **Source** - Individual aggregate source, i.e., a specific quarry or pit location supplying a specific product or products.
- 3.16 **Source Classification** - Under this program, a Source will be classified as Certified, De-Certified, or Non-Certified.
- 3.16.1 **Certified Source** - A Source that has met the requirements for certification and is allowed to supply aggregate for Department/Local Agency projects.
- 3.16.2 **De-Certified Source** - A Source that has had its Certified Source status revoked because requirements warranting certification have not been maintained. A De-Certified Source shall not be allowed to supply aggregate to Department/Local Agency projects.
- 3.16.3 **Non-Certified Source** - A Source that does not initially meet certification requirements or has not applied for certification.
- 3.17 **Source QC Plan** - A QC Plan detailing how a source designated as Outlying will comply with the AGCS.
- 3.18 **Standard Specifications** - Current edition of the Illinois Department of Transportation [Standard Specifications for Road and Bridge Construction](#).
- 3.19 **Supplier Yard** – A Yard which buys aggregate from an AGCS or IDOT-inspected source and resells the aggregate from the yard for use on IDOT contracts (includes local agency projects with state and or federal funding).
- 3.20 **Terminal** – A location owned by, leased to, or provided to an AGCS or IDOT-inspected source from which the source ships aggregate for use on IDOT contracts (includes local agency projects with state and or federal funding).

4.0 GENERAL RESPONSIBILITIES

- 4.1 The Bureau shall maintain a QPL identifying certified sources. Only Certified Sources shall supply material to Department/Local Agency projects. Each Certified Source shall maintain its own Gradation Control Program unless producing Category IV aggregate only. Aggregate shipped from a Certified Source shall be certified to meet the quality and gradation requirements in the Standard Specifications. However, if approved by the District, the Source may choose to certify and supply other than standard Department gradations as established by the criteria in Article 6.2 herein.
- 4.2 A Supplier Yard shall meet the requirements of the AGCS on all aggregates which will be used on IDOT contracts (including local agency with state/federal funding). Start-of-Production (6.3.1) and Normal-Production (6.3.2) sampling/testing shall be waived. The incoming aggregate sampling/testing shall be according to the current Department QC/QA document, Model Annual Quality Control (QC) Plan for Hot-Mix Asphalt (HMA) Production, Section B. Materials, 1. Aggregates, b. Incoming Aggregate Gradation Samples.
- 4.3 A Terminal shall meet all the requirements of the AGCS on all aggregates which will be used on IDOT contracts (including local agency with state/federal funding). Start-of-Production (6.3.1) and Normal-Production (6.3.2) sampling/testing shall be waived.

5.0 REQUIREMENTS FOR SOURCE CERTIFICATION

- 5.1 A Certified Source shall have been checked using the procedures set forth in Section 10.0 herein and found to meet the requirements for Source certification. Any Source subsequently found not meeting these or any other requirements of this program shall be removed from the QPL based on the procedure detailed in Section 11.0.

The requirements for Source certification are as follows:

- 5.1.1 Gradation Control Program - Gradation samples shall be taken and tested as per Section 6.0 herein.

Gradations and their ranges established per Article 6.2 herein which do not meet the Standard Specifications shall be submitted to the District for approval prior to production.

- 5.1.2 Stockpiling and Handling - Degradation is of primary concern in handling aggregates. Steel-tracked equipment shall not be operated on stockpiles. Free-fall from conveyor equipment onto load-out stockpiles shall be held to a maximum of 15 feet. The fall height requirement may be waived if the aggregate source uses special remixing procedures or a device approved by the Bureau. A comparison of a series of samples taken during the reclaiming or loading-out operation to those taken from the production belt should be made to estimate the effect of the aggregate-handling method on degradation.

Stockpiling and handling of aggregate should be designed to hold segregation to a minimum. Coned stockpiles shall not be built with stationary or movable conveyor equipment unless the reclaiming method is such that the loaded-out material visually shows minimal segregation. Radial and longitudinal conveyors or stackers shall be kept in motion to reduce coning. Where possible, a spreader chute on the stacker shall be used to broaden or flatten the wedge shape of the pile. Cascading down the sides of the pile should be held to a minimum. Material shall be reclaimed from wedge-shaped piles with an end-loader or equipment having similar type loading action working from the end of the pile, with care taken to work the entire width of the pile to remix the material as much as possible. Aggregate-handling methods using tunnel conveyor systems to reclaim aggregate from coned surge piles shall be checked for consistency of gradation. The method of aggregate-handling and stockpiling currently in use at a particular Source shall be considered satisfactory provided that the product, when checked at a load-out point, meets the gradation requirements.

Materials certified under this program shall be stockpiled separately and identified by signs. Signs shall have a minimum of 3" lettering. Each individual sign shall be free-standing and moveable. Any changes made to signing must be pre-approved by the District.

- 5.1.3 Approved Laboratory - Laboratory facilities and equipment shall conform to Section 7.0 herein. Laboratories shall be checked by District personnel and reapproved on a biennial basis. One (1) laboratory may be used as an approved laboratory for more than one (1) Source as long as no problems occur in maintaining each Source's Gradation Control Program.

- 5.1.4 **Sampling and Testing Personnel** - Sampling and testing personnel overseeing the Source's control processes (including consultants and contractors) at the Source shall be Aggregate Technicians.

The Source may use an AGCS Technician to perform all duties of an Aggregate Technician except when splitting and gradation testing. When an AGCS Technician is used, splitting and gradation testing shall be performed by an Aggregate Technician or a Mixture Aggregate Technician.

The Source may use Gradation Technicians for splitting and gradation testing only. The Gradation Technician shall be under the direct supervision of the Aggregate Technician when testing gradation samples. The Source may also use Mixture Aggregate Technicians for sampling and gradation testing only. The Mixture Aggregate Technician shall be under the supervision of the Aggregate Technician or the AGCS Technician. The Aggregate Technician, Gradation Technician or Mixture Aggregate Technician, shall demonstrate gradation testing proficiency to the Aggregate Inspector on a quarterly basis.

Any Mixture Aggregate Technician qualified personnel, when performing sampling and testing for a HMA or PCC Contractor, shall not concurrently perform the duties of an Aggregate Technician, an AGCS Technician, or a Mixture Aggregate Technician in the AGCS.

6.0 GRADATION CONTROL PROGRAM

- 6.1 The Gradation Control Program shall be run by an Aggregate Technician or an AGCS Technician as defined in Section 3.0 herein. The QC Manager shall assume responsibility for compliance with the Aggregate Gradation Control System and specifically shall ensure that the Aggregate Technician, AGCS Technician, or Mixture Aggregate Technician is performing all the required duties under the Aggregate Gradation Control System.

All communication concerning the Aggregate Gradation Control System shall be directed to the QC Manager.

Primary duties of the Aggregate Technician shall include frequent visual inspection, gradation sampling and testing, documentation, etc., as detailed herein and in QC/QA Procedure, "Quality Control (QC) Manager / Aggregate Technician / AGCS Technician / IDOT Inspector / Gradation Technician Responsibilities", located in the current Manual of Test Procedures for Materials.

The AGCS Technician may perform the same duties as the Aggregate Technician except splitting and gradation testing. Splitting and gradation testing shall be performed by an Aggregate Technician or a Mixture Aggregate Technician or a Mixture Aggregate Technician.

- 6.2 **Gradation Specifications** - Sieve limits for each sieve/each product under the Aggregate Gradation Control System shall be as specified in the Department's Standard Specifications and/or as amended herein. The special critical sieve criteria applies to designated products as described in QC/QA Procedure, "Aggregate Producer Control Chart Procedure" located in the current [Manual of Test Procedures for Materials](#).

The midpoint/tolerance range of a designated critical sieve shall be developed from an average as shown in QC/QA Procedure, "Aggregate Producer Control Chart Procedure". The average shall be a historical average, or a start of production average derived from 5 start-of-production samples agreed to by the Department. All 5 start of production samples must pass the established critical sieve limit. Critical sieve limits will take precedence over Standard Specification limits. Requests for critical sieve limits shall be submitted in writing to the District Materials Engineer for approval.

The top and bottom sieves shall not be altered. For all other sieves, limits may be developed based on historical or start of production values. These sieve limits may be different from those in the Standard Specifications. These modifications are also allowed for fine aggregate. Changes in the top sieve or any No. 200 sieve ranges will not be permitted. In cases where the bottom sieve is other than the No. 200 sieve, a variance in limits may be granted if the Bureau determines the minus No. 200 material to be within acceptable limits. The Source shall request in writing to the District Materials Engineer approval of limits other than those in the Standard Specifications, but the range of the limits shall remain the same as the Standard Specifications except on critical sieves where critical sieve limits will take precedence. The agreed upon gradation limits shall apply at the final point of shipping within the Source's control.

The Department reserves the right to reject unacceptable material at any point prior to incorporation into the final product.

- 6.3 **Sampling and Testing** - Gradation samples shall be reduced to testing size by Illinois Test Procedure 248. Minimum Field Sample Size and Minimum Test Sample Size shall be as noted in the Sample Size table, Illinois Specification 201. All sampling and gradation testing shall conform to Illinois Test Procedure 2, Illinois Test Procedure 248, Illinois Test Procedure 11, and Illinois Test Procedure 27. The Illinois Test Procedures noted above are located in the current [Manual of Test Procedures for Materials](#).

Sampling and testing frequencies (including washed tests) by category/use shall be as noted in Table 1 herein.

Definitions of each frequency are as follows:

- 6.3.1 **Start-of-Production Frequency** - After a seasonal shutdown of production or when first producing a new product, the sampling and testing of start-up production or of the new product shall be at start-of-production frequencies/requirements noted in Table 1.
- 6.3.2 **Normal-Production Frequency** - During normal production, the minimum production sampling and testing frequency/requirements as noted in Table 1 shall be maintained.
- 6.3.3 **Stockpile Frequency** - During loadout of stockpiles, the minimum stockpile sampling and testing frequency/requirements as noted in Table 1 shall be maintained for each stockpile.
- 6.3.4 **Production Changes (Short-Term Shutdowns for Screen Changes, Crusher Modifications, Different Feed Rates, New Products, etc.)** - If a production change is made, a washed gradation sample shall immediately be run on all affected products. The start-of-production sampling frequency shall be implemented if the result on any critical

sieve in that sample exceeds the warning bands on the critical sieve or if any results fail any specified sieve limits.

- 6.4 **Documentation** - Gradation results shall be charted on control charts, if required in Table 1, according to QC/QA Procedure, "Aggregate Producer Control Chart Procedure", located in the current [Manual of Test Procedures for Materials](#). Within one (1) working day of sampling, all gradation results shall be charted, posted, or entered into a Source computer, each of which shall be located at the Source and/or approved laboratory, at the District's option. Computer-maintained charting must be approved by the Department and accessible in a timely manner during any Department inspection. Computer-maintained charts shall be printed and displayed once per week or at the request of the Department. Control charts are the property of the Department and shall not be removed or altered in any manner. The Aggregate Inspector will check the control charts on a regular basis. Source gradation computation sheets will be maintained by the Department for a minimum of three (3) years after the date run.

A Source diary shall be maintained by the Aggregate Technician or the AGCS Technician. The Aggregate Technician or the AGCS Technician shall log all actions taken during the production day, such as new product production, sampling, resampling, screen changes, separate stockpiling, visual inspections, etc., as noted in QC/QA Procedure, "Quality Control (QC) Manager / Aggregate Technician / AGCS Technician / IDOT Inspector / Gradation Technician Responsibilities" in the current [Manual of Test Procedures for Materials](#).

The Source shall immediately notify the District whenever new products are being produced at the Source under its Gradation Control Program.

- 6.5 **Failing Gradation Samples** - Any Failing Gradation Sample (start-of-production, normal-production, or stockpile) shall be evaluated according to the following procedure and, if necessary, immediate action taken to correct a failing gradation.

If a gradation sample fails, one (1) resample from the same sampling location shall immediately be taken and tested. If the resample passes, the testing frequency being run prior to the failure shall be resumed. If the resample fails, a second resample shall immediately be taken.

If the second resample passes, the start-of-production sampling frequency shall be initiated. All samples in the series must pass before the normal production or stockpile sampling frequency for that location can be restarted.

If the second production resample fails, production of that specified aggregate shall not be incorporated in the approved stock, or, in the case of the second stockpile resample failing, shipment from that stockpile shall cease. Corrective action shall be initiated by the Source. No material shall be placed on or, in the case of stockpile problems, shipped from the certified stock until a passing gradation sample is taken and tested. The start-of-production frequency shall then be run at that location. All samples in the series must pass before the normal-production or stockpile sampling frequency for that location can be restarted.

All resamples shall be washed gradation tests except as stated under Note 2 in Table 1.

Any action taken, such as resampling, screen changes, separate stockpiling, etc., shall be noted in the remarks area of the failing test computation sheet and in the Source diary.

The Aggregate Technician or the AGCS Technician shall monitor the corrective action. Failure to comply with Article 6.5 herein shall cause the Source to be removed from the QPL as per Section 11.0 herein.

- 6.6 **Failing Monitor Gradation Samples** - Any Source's failing Monitor gradation sample taken and tested by the Department and determined to be a Source problem per Section 9.6 will be considered a Failing Gradation Sample under the Source's Gradation Control Program and shall cause the Source to enact Article 6.5 herein.

7.0 APPROVED LABORATORY

- 7.1 An approved Source laboratory shall have the required equipment or alternatives approved by the Bureau specified in the Appendix D3 "Aggregate Laboratory Equipment" in the [Manual of Test Procedures for Materials](#).
- 7.2 If a mixture QC laboratory is used for AGCS testing, the following additional equipment is required for use only on AGCS aggregate samples:
- One set of nested sieves for coarse and/or fine aggregate.
 - One set of wash sieves.
 - One coarse and/or fine aggregate splitter.

8.0 OUTLYING (OS) SOURCE REQUIREMENTS

- 8.1 Each district may designate a certified aggregate Source located out-of-state which shall follow specific requirements in running the AGCS, listed herein. The District shall detail the criteria used to qualify the Source for the Outlying designation. The Source QC plan tentatively approved by the District shall accompany the District request.

The Bureau shall notify the District Materials Engineer in writing as to whether the aggregate Source has met the Outlying criteria, the Source QC Plan is acceptable, and the Source will be designated as an Outlying (OS) Source and placed on the QPL.

- 8.2 The OS Source shall follow all requirements of the AGCS program unless otherwise noted within this section. A Source QC plan shall be submitted for department approval to the inspecting District. Other states' QC/QA programs or parts thereof may be substituted for the Illinois AGCS program, if approved by the Bureau. All substitutions/changes shall be noted in the Source QC Plan. The minimum sampling frequencies noted in the Illinois AGCS program shall be met regardless of frequencies listed in the other state programs.
- 8.3 The District will, at least annually, visit each Source to obtain quality and gradation samples, observe program procedures, and inspect the AGCS laboratory. Laboratory inspections conducted under other states' programs may be used if the OS Source has been approved to use the other states' QC/QA program.

These inspections may be unannounced.

- 8.4 The District will inspect, sample, and test incoming aggregate according to the specified AGCS monitor frequency at Illinois sites (job sites, mix plants, terminals, or supplier yards). Split sample, load-out, and comparison requirements noted in Section 9 herein will be waived.

The District will communicate the test results to the QC Manager at the aggregate Outlying Source (OS) for appropriate action, including any needed corrective action. In addition, the District will communicate the test results to any QC Manager or Resident Engineer at the jobsite, mix plant, terminal, or supplier yard, for appropriate action, including the need for corrective action.

- 8.5 Outlying Sources shall notify their inspecting District of all scheduled AGCS shipments/production (including shipments to mix plants, terminals, and supplier yards) prior to the shipment/production.
- 8.6 Once designated as an Outlying Source (OS), all aggregate, including Category I, III, and IV, shipped to Illinois Department of Transportation projects (including all Local Agency projects) shall be produced under the AGCS program. Category IV shall be run at the Category III frequency.

9.0 DEPARTMENT RESPONSIBILITIES

- 9.1 Sampling and testing for quality shall remain the responsibility of the Department. A Consultant, hired by the Department to perform the duties of an Aggregate Inspector, will not be allowed to take any quality or Freeze-thaw samples at an aggregate Source.
- 9.2 Monitor gradation samples at the Source shall be taken, by or in the presence of an Aggregate Inspector, from each aggregate being produced for designated use at each Certified Source. All Monitor samples shall be split samples of a Source's gradation sample taken as per the Source's Gradation Control Program. Additionally, the Department reserves the right to sample Monitor samples at any time. At least two (2) out of every five (5) Monitor samples shall be taken from the stockpile's loadout face once loadout procedures have started. The Monitor samples will be tested by District personnel on Department testing equipment according to the first paragraph of Section 6.3 herein. All Monitor samples shall be washed gradation tests unless Note 2 in Table 1 is applicable. Each Monitor sample shall be identified as to sampling location.
- 9.3 Sampling and testing frequency for the Monitor gradation samples shall be a minimum of one (1) sample per every twenty (20) production days for each gradation being produced for designated use.
- 9.4 All Monitor gradations run will be reported in the MISTIC system. Computation sheets will be retained for a minimum of three (3) years in the Department's Source file.
- 9.5 The Inspector will compare both the Monitor sample and the Source's split sample for validity as defined by the Department's "Guideline for Sample Comparison" (see Appendix A of the current Manual of Test Procedures for Materials). The reason for any significant difference between the two (2) samples shall be identified and corrected.

- 9.6 All Monitor gradations will be communicated to the QC Manager. All failing monitor gradations will be investigated by the Department. Any failing gradations, which are determined to be a Source problem not already corrected by the Producer, shall cause Article 6.6 herein to be enacted by the Source. The Aggregate Inspector will compare the failing gradation to the Source's control charts and/or split sample computation sheet. If the control chart indicates that the Source is aware of the problem and is taking corrective action, normal Monitor sampling may resume. The Aggregate Inspector will continue to visually monitor the problem and the Source's corrective action. If the control chart indicates the Source is not aware of the problem, a split sample of the Source's next sample as specified in Article 6.5 shall be tested. Failure of the Source to follow Article 6.6 shall result in the Source being removed from the QPL per Section 11.0 herein.

10.0 SOURCE CERTIFICATION PROCEDURE

- 10.1 An aggregate Source wishing to become certified shall verbally contact the District. A preliminary meeting may be held to discuss requirements of the program. After the initial contact or the preliminary meeting, a written request for certification shall be submitted to the District Materials Engineer.
- 10.2 An evaluation team composed of two (2) District personnel shall conduct an inspection of the Source for compliance to the certification checklist for all Sources producing Category I and III aggregate. A formal meeting with the Source's management, QC Manager, and quality control personnel shall be held to discuss the Source's Gradation Control Program requirements. The Source shall submit a certification letter and an [Aggregate Shipping Tickets Information Form for Producers \(BMPR AGG01\)](#) as designated by the Department. Each Source shall provide and maintain their own quality-on-tickets form and a listing of current certified gradations being produced under the Aggregate Gradation Control System. The certification letter and the [Aggregate Shipping Tickets Information Form for Producers Form \(BMPR AGG01\)](#), shall be forwarded to the Bureau before the Source will be added to the QPL.
- 10.3 Each Certified Source will be reevaluated on a biennial basis by District personnel. The reevaluation shall be a complete evaluation of the Source's laboratory and technician(s). A copy of the reevaluation checklist and comments shall be forwarded to the Bureau. Failure to comply with the certification criteria will result in the Source's certification being revoked as per the procedure detailed in Section 11.0 and the Source will be classified as De-Certified and removed from the QPL.
- 10.4 If at any time a Certified Source does not maintain the proper QC personnel, the Source will be given thirty (30) days to comply by either hiring a new QC person, training existing personnel or by contracting with a qualified consultant. If after thirty (30) days the source does not have the proper QC personnel; the Source's Certification will be revoked by the Bureau. Section 11.0 will not apply to this type of Revocation. The Source will be reinstated on the QPL once the proper QC personnel are acquired.

As an option to this type of Revocation, a Source may utilize a Gradation Technician for gradation testing as long as the following criteria are met:

- The Source shall inform the district, in writing, of the QC personnel change.

- The Source shall have an Aggregate Technician visit the Source a minimum of three (3) times a day to oversee the Gradation Technician.
- The Source shall have the proper personnel trained and in place in a timeframe acceptable to the Bureau.

11.0 REVOCATION OF A SOURCE'S CERTIFICATION

11.1 The Department may revoke a Source's Certification for any of the following reasons:

- Failing to follow the procedures and requirements of the Aggregate Gradation Control System (AGCS) Policy Memorandum.
- Misrepresentation of materials or products.
- Failing to follow the approved Quality Control Plan.

11.2 Before removal, the District Materials Engineer will detail, in a non-conformance letter to the Source's QC Manager, reason/s the Department is seeking to revoke the Source's Certification. The Source will have two weeks to reply. The Source shall not place materials in question on certified stockpiles during the two-week period. If the Department's reasons warrant, the Source may be required to stop shipment of any and all products to Department and/or Local Agency projects.

11.3 Within this two-week period, the Source's QC Manager shall reply provide a written response outlining the steps the Source is taking to address the issues outlined in the Department's non-conformance letter.

11.4 After receipt of the Source's letter, the District will schedule a meeting with the Source to discuss the proposed revocation and the Source's response. Based on this meeting, the District Materials Engineer will either (1) conclude the steps taken by the Source's QC Manager are adequate and terminate the revocation process, or (2) conclude the Source's response does not adequately address the issues outlined in the Department's non-conformance letter and recommend in writing to the Bureau that the Source be taken off the QPL. The recommendations shall include details and District/Source comments concerning the proposed revocation. Copies of all correspondence, including meeting minutes, shall be sent to the Bureau and the Source.

11.5 If requested by the Source within seven days of the District's recommendation to revoke the Certification, the Bureau will schedule a meeting with the Source's QC Manager and the District. Based on this meeting, the Bureau will either terminate the revocation process or proceed with removing the Source from the QPL.

The Bureau's decision to revoke the Source's Certification is a final agency decision of the Illinois Department of Transportation.

11.6 The Bureau will notify the District Materials Engineer and Source in writing when a Source's Certification has been revoked and that the Source has been removed from the QPL and has been listed as a De-Certified Source. The Source shall not supply aggregate materials or products for Department and/or Local Agency projects until the Source's Certification has been reinstated on the QPL.

- 11.7 If the revocation process is not based on misrepresentation of materials or products, and/or failure to follow the overall general requirements of this policy, the QC Manager, at any time, may inform the District in writing that the Source is no longer producing or shipping a specific gradation. This action will terminate any revocation process against the Source concerning the materials in question. Production of that gradation for the AGCS shall not be restarted unless the District concurs that corrective action has been completed by the Source.

12.0 REINSTATEMENT OF A SOURCE'S CERTIFICATION

The Source may re-apply for reinstatement of its certification at the end of the revocation period. Re-application shall be in writing to the Bureau and include the specific steps to be taken to correct the cause for loss of certification.

13.0 CLOSING NOTICE

Archive versions of this policy memorandum may be examined by contacting the Bureau of Materials.

The current Bureau Chief of Materials has approved this policy memorandum. Signed documents are on file with the Bureau.

TABLE 1						
Category	Use	Start of Production	Normal Production	Stockpile/ Loadout	Control Charts	Master Band
I (Notes 1 & 5)	Coarse Aggregate and Manufactured Sand Used in HMA and PCC Coarse Aggregate for Pavement Drainage	1 per 1,000 T (907 metric tons) for the first 5,000 T (4,536 metric tons) (all wash)	1 per 2,000 T (1,814 metric tons) 2 per day max (wash 1/3 coarse agg.) (wash all manufactured sand)	2/week (all wash) (Note 3)	Yes	Yes (Note 8)
III (Notes 1 & 5)	Natural Sand for All PCC and HMA Projects Aggregate Surface Course Granular Shoulders Granular Sub-base Granular Base Granular Embankment Special Cover/Seal Coat Sand Bedding Porous Granular Embankment and Bedding, Sand Backfill for Underdrains French Drains Membrane Waterproofing Mortar Sand Blotter Granular Embankment Aggregate Subgrade (Note 9)	1 per 2,000 T (1,814 metric tons) for the first 4,000 T (3,629 metric tons) (all wash) (Note 2)	1 per 10,000 T 2 per day max 1 per week min (all wash) (Notes 2 & 6)	1/week (all wash) (Notes 2 & 7)	No	No

Table 1 (cont.)						
Category	Use	Start of Production	Normal Production	Stockpile/ Loadout	Control Charts	Master Band
IV (Note 4)	Rock Fill Erosion and Sediment Control Rip-Rap Bedding Ice Control Abrasives Trench Backfill	Department Testing				

Note 1: A producer may adjust gradation bands for any product in accordance with Article 6.2 of the AGCS.

Note 2: Wash only products used for HMA, PCC, Seal/cover coat and products with # 200 sieve requirements.

Note 3: No loadout tests for quantities under 500 tons (454 metric tons) or less shipped weekly. When loadout occurs but no weekly loadout test is run, the tonnage shipped shall be accumulated from the start of that week. When the accumulated tonnage exceeds 500 tons (454 metric tons), a loadout sample shall be run.

Note 4: Testing to be performed by IDOT personnel.

Note 5: Testing frequency may be reduced based on conformance to QC requirements, consistency in meeting sieves' midpoints, statistical consistency, etc.

Note 6: Minimum of 1 per week after the first 10,000 tons (9,072 metric tons) of production per week for aggregate surface course, granular shoulders, granular subbase, granular base, and granular embankment special; minimum of 1 every 2 weeks if production less than 10,000 tons (9,072 metric tons) per 2-week period.

Note 7: No loadout tests for quantities under 1,000 tons (907 metric tons) or less shipped weekly. When loadout occurs but no weekly loadout test is run, the tonnage shipped shall be accumulated from the start of that week. When the accumulated tonnage exceeds 1,000 tons (907 metric tons), a loadout sample shall be run.

Note 8: Refer to current QC/QA Procedure, "Aggregate Producer Control Chart Procedure" for required gradation.

Note 9: Only Normal Production testing shall apply. No Wash.

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 (\bar{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	\bar{X}	$(\bar{X} - \bar{X})$	$(\bar{X} - \bar{X})^2$
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 $\bar{X} = 21.34 / 4 = 5.328$

Variance $(S)^2 = \text{Sum } \frac{(\bar{X} - \bar{X})^2}{3} = \frac{5.699}{3} = 1.900$

Standard Deviation $S = \sqrt{1.900} = 1.378$

3. Test for Outliers

Check for Critical "T" Values

$$T = \frac{|(X_1 - \bar{X})|}{S} = \frac{|3.96 - 5.328|}{1.378} = 0.99$$

* Difference between the suspect test value (X_1) and the Mean (\bar{X}).

If the T value exceeds the critical "T" Value in the table below and no assignable cause 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 (\bar{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 (N)	Critical "T" Value 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).

$$Q_L = \frac{(\bar{X} - 1)}{S} = \frac{5.328 - 1}{1.378} = 3.141$$

$$Q_U = \frac{(7 - \bar{X})}{S} = \frac{7 - 5.328}{1.378} = 1.213$$

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:

$$\% \text{ Adjustment} = 0.5 \text{ PWL} + 55.0$$

$$\% \text{ Adjustment} = 0.5 (89.4) + 55.0$$

$$\% \text{ Adjustment} = 99.7$$

$$\text{Adjusted Quantities} = \% \text{ Adjustment} \times \text{Lot Quantities}$$

$$\text{Adjusted Quantities} = 0.997 \times 2000 \text{ tons}$$

$$\text{Adjusted Quantities} = 1994 \text{ tons}$$

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

February 20, 2014

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 saturated surface-dry procedure.

B. DEFINITIONS

1. Bulk Specific Gravity (G_{mb}) 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_{mm}) 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° 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 vertical 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.

$$G_{mb} = \frac{A}{B - C}$$

G_{mb} = 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:

$$\% \text{ Density} = 100 \times \frac{G_{mb}}{G_m}$$

G_{mb} = Bulk Specific Gravity

G_{mm} = Theoretical Maximum Gravity*

Note: The Theoretical Maximum Gravity (G_{mm}) 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:

$$\% \text{ Air} = 100 - \% \text{ Density}$$

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_{mb}). The volume of a square yard of pavement one (1) inch 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, one (1) inch thick weighs:

$$\text{Pounds / Sq. Yd. (1" thick)} = 0.75 \times 62.37 \times G_{mb}$$

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 87-4, dated January 1, 2004

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

April 1, 2010

Springfield

Number 96-1

TO: CONSULTING ENGINEERS

SUBJECT: 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.
 - b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the *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.

III. PRODUCTION TESTING

- a. One set of cylinders or beams, depending on the strength specified, shall be cast for acceptance testing for each day the mix is used. In addition, at least one slump and one air test shall be conducted for each day the mix is used. If more than 100 c.y. of the mix is placed in a given day, additional tests at a frequency of 1 per 100 c.y. shall be taken for strength, slump, and air. The concrete shall have a maximum slump of three inches (3") and minimum slump of one inch (1") when tested in accordance with ASTM C-143. The air content of the concrete shall be between 5% and 8% by volume. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- b. If the total proposed amount of Item 610 Structural Portland Cement Concrete as calculated by the Resident Engineer is less than 50 c.y. for the entire project, the following shall apply:
 - The Resident Engineer shall provide calculations of the quantity of Item 610 to the Division of Aeronautics.
 - One set of cylinders or beams, depending on the strength specified, shall be cast for acceptance testing.
 - One air content and one slump test shall be taken for acceptance testing.
 - The concrete shall have a maximum slump of three inches (3") and minimum of one inch (1") when tested in accordance with ASTM C-143. The air content of the concrete shall be between 5% and 8% by volume. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.
- c. 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.

Steven J. Long, P.E.
Acting Chief Engineer

Supersedes Policy Memorandum 96-1 dated January 1, 2004

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

January 1, 2004

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 96-2, "*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 96-2. 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. At the option of the Engineer, 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.

B. 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:

<u>Test Parameter</u>	<u>Acceptable Limits of Precision</u>
% 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 of Mixture	0.026
Bulk Specific Gravity of Marshall Sample	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 shall take immediate corrective action. After corrective action, both 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 Policy Memorandum 87-2, or according to the acceptance procedure outlined in the Special Provisions.

Steven J. Long, P.E.
Acting Chief Engineer

Supersedes Policy Memorandum 96-3 dated January 1, 1997

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

June 12, 2014

Springfield, Illinois

Number 2003-1

TO: 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) 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 and approved by the Illinois Division of Aeronautics (IDA). The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Quality Control testing as well as the Resident Engineer's acceptance testing as described in Policy Memorandum 87-2.

The effective working area of the laboratory shall be a minimum of 600 square feet with a ceiling height of not less than 7.5 feet. Lighting shall be adequate to illuminate all working areas. It shall be equipped with heating and air conditioning units to maintain a temperature of 70° F ±5° F.

The laboratory shall have equipment that is in good working order and that meets the requirements set forth in the following ASTM test standards:

ASTM D 70	Test Method for Specific Gravity and Density of Semi-Solid Materials
ASTM C 117	Test Method for Materials Finer than 75 µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C 566	Total Moisture Content of Aggregate by Drying
ASTM D 75	Sampling Aggregates
ASTM D 2041	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures

ASTM D 2172	Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
AASHTO T 308-09	Ignition Method for Determining Asphalt Content (Illinois Modified)
ASTM D 2726	Bulk Specific Gravity of Compacted Bituminous Mixtures using Saturated Surface Dry Specimens
ASTM D 3203	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D 2950	Density of Bituminous Concrete in Place by Nuclear Method
ASTM D 4125	Asphalt Content of Bituminous Mixtures by Nuclear Method
ASTM C 127	Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate
ASTM C 128	Standard Test Method for Specific Gravity and Absorption of Fine Aggregate

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 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: Mix design submittals should be sent to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer. 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. Preliminary Mix Design Submittal

Top half of the IDOT Mix Design Software Cover Sheet (QC/QA Package) should be completed for the aggregate mix design parameters and should include the following:

1. Producer name, Producer # and Producer location of each aggregate (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. 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 – 3.2 JOB MIX FORMULA, Table 2. (Appendix A)
6. Producer name, Producer #, and specific gravity of the proposed asphalt cement
7. IDOT approved PG Binder 64-22 shall be used unless otherwise specified by the IDA Engineer of Construction & Materials.

B. Mixture Design & Testing

Design Parameters

Gyrations (N_{des}) – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 1

Asphalt Content – AC% per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 2

Maximum Specific Gravity – G_{mm} (ASTM D 2041)

Bulk Specific Gravity – G_{mb} (ASTM D 2726)

% air voids – V_a (ASTM D3203) per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 2

VFA % – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table 1

Mixture Tests

After verification and approval by IDA of the proposed design information from step A., the Contractor shall perform mixture tests on 4 gyratory brix (4 point mix design) to determine the optimum AC content for the target Air Voids.

C. Mix Design Submittal

The Preliminary JMF including all test results shall be reported to IDA, Construction/Material Section, Attn: Certification and Mixtures 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_{mb} , G_{mm} , VMA, Voids (Total Mix), Voids Filled, V_{be} , P_{be} , P_{ba} , G_{se}
- h) Optimum design data listing: AC % Mix, G_{mb} , G_{mm} , VMA, Voids (Total Mix), Voids Filled, G_{se} , G_{sb}

- 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

D. Mix Approval

Once the proposed JMF is reviewed and approved by IDA, a JMF approval letter will be issued to the contractor. Production of HMA is not authorized until a JMF letter has been issued. When a Test Section is specified as part of the contract, the proposed JMF shall be considered preliminary until it passes all Test Section requirements.

E. Change in Material Sources

The above procedure, III. MIX DESIGN SUBMITTAL shall be repeated for each change in source or gradation of materials.

IV. MIX PRODUCTION TESTING

The Quality Control of the manufacture and placement of HMA mixtures is the responsibility of the Contractor. 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 M-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 work day. 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.

- A. Gradations for Mixture Proportioning: Aggregate gradations for proportioning (ASTM C-136) are required at a minimum of one per week when mix is produced. Aggregate gradations can be either hot bin gradations for batch plants or stockpile gradations for drier drum plants. Hot bin gradations may be reported on either form AER 9 or on the Division of Highways QC/QA package "Grad 1" Tab in the Daily HMA Plant Reporting Module. Stockpile gradations shall be shown on form MI504QC from the "Print Out" Tab in the Aggregate Stockpile Module of The Division of Highways QC/QA Package.
- B. Production Mixture Testing: 1 per 1000 tons of the following (if total daily quantity is \leq 200 tons (small quantity) then a mix sample is not required and this quantity may be added on to next day's total for testing. Two consecutive days without testing is not allowed.): Reflux extraction (ASTM D2172) or Ignition oven test showing gradation and AC Content, Maximum Specific Gravity (ASTM D 2041), Bulk Specific Gravity (ASTM D 2726) and % Air Voids (ASTM D 3203). Calculations of the results (including weight data) shall be shown on the "Voids 1" and "IGN & NUC AC 1" tab printouts from the Division of Highways QC/QA Package Daily HMA Plant Reporting module.

- C. A certification from the quarry for the total quantity of aggregate listing the source, gradation type, and quality designation of aggregate shipped. The Aggregate Certification of Compliance (AER18) may be used by the contractor for this purpose.
- D. Original asphalt shipping tickets listing the source and type of asphalt shipped.
- E. Check sample tests at a rate of 1/5000 tons randomly selected by the R.E. shall be sent with an identification sheet to an independent laboratory designated by the Division of Aeronautics. If the project is < 5000 tons, 1 sample selected randomly shall be sent.
- F. Bituminous Test Summary (AER 14) Note: The R.E. should make certain that the Contractor fills this form out daily (for mix production days) and distributes it daily to the Division of Aeronautics and R.E. The Contractor (QC Manager) is required to note any adjustments to the mix or to the plant (proportioning) in the "Remarks/Corrective Measures" section of the AER 14.

V. QUALITY CONTROL

- A. Control Limits (Control Charts used for projects > 4000 tons per bituminous concrete pay item)

Target values shall be determined from the approved JMF. The target values shall be plotted on the control charts within the following control limits:

Control Limits

<u>Parameter</u>	<u>Individual Test</u>	<u>Moving Avg. of 4</u>
% Passing		
1/2 in.	± 7 %	±4 %
No. 4	±7 %	±4 %
No. 8	±5 %	±3 %
No. 30	±4 %	±2.5 %
No. 200 *	±2.0 % *	±1.0 % *
Asphalt Content	±0.45 %	±0.2 %

* No. 200 material percent's shall be based on washed samples. Dry sieve gradations (-200) shall be adjusted based on anticipated degradation in the mixing process.

- B. Control Charts (Control Charts used for projects > 4000 tons per bituminous concrete pay item)

Standardized control charts shall be maintained by the Contractor at the field laboratory. The control charts shall be displayed and be accessible at the field laboratory at all times for review by the Engineer. The individual required test results obtained by the Contractor shall be recorded on the control chart immediately upon completion of a test, but no later than 24 hours after sampling. Only the required plant tests and resamples shall be recorded on the control chart. Any additional testing of check samples may be used for controlling the Contractor's processes, but shall be documented in the plant diary.

The results of assurance tests performed by the Resident Engineer will be posted as soon as available.

The following parameters shall be recorded on control charts:

1. Combined Gradation of Hot-Bin (Batch Plant) or Combined Belt Aggregate Samples (Drier Drum Plant) (% Passing 1/2 in., No. 4., No. 8, No. 30, and No. 200 Sieves)
2. Asphalt Content
3. Bulk Specific Gravity (G_{mb})
4. Maximum Specific Gravity of Mixture (G_{mm}) C.

Corrective Action for Required Plant Tests

Control Limits for each required parameter, both individual tests and the average of four tests, shall be exhibited on control charts. Test results shall be posted within the time limits previously outlined.

1. Individual Test Result. When an individual test result exceeds its control limit, the Contractor shall immediately resample and retest. If at the end of the day no material remains from which to resample, the first sample taken the following day shall serve as the resample as well as the first sample of the day. This result shall be recorded as a retest. If the retest passes, the Contractor may continue the required plant test frequency. Additional check samples should be taken to verify mix compliance.
2. Asphalt Content. If the retest for asphalt content exceeds control limits, mix production shall cease and immediate corrective action shall be instituted by the Contractor. After corrective action, mix production shall be restarted, the mix production shall be stabilized, and the Contractor shall immediately resample and retest. Mix production may continue when approved by the Engineer. The corrective action shall be documented.

Inability to control mix production is cause for the Engineer to stop the operation until the Contractor completes the investigation identifying the problems causing failing test results.

3. Combined Aggregate/Hot-Bin. For combined aggregate/hot-bin retest failures, immediate corrective action shall be instituted by the Contractor. After corrective action, the Contractor shall immediately resample and retest. The corrective action shall be documented.
 - a. Moving Average. When the moving average values trend toward the moving average control limits, the Contractor shall take corrective action and increase the sampling and testing frequency. The corrective action shall be documented.

The Contractor shall notify the Engineer whenever the moving average values exceed the moving average control limits. If two consecutive moving average values fall outside the moving average control limits, the

Contractor shall cease operations. Corrective action shall be immediately instituted by the Contractor. Operations shall not be reinstated without the approval of the Engineer. Failure to cease operations shall subject all subsequently produced material to be considered unacceptable.

- b. Mix Production Control. If the Contractor is not controlling the production process and is making no effort to take corrective action, the operation shall stop.

VI. TEST SECTION AND DENSITY ACCEPTANCE (**Note: Applies only when specified.**)

- A. The purpose of the test section is to determine if the mix is acceptable and can be compacted to a consistent passing density.

A quick way to determine the compaction of the mix is by the use of a nuclear density gauge in the construction of a growth curve. An easy way to construct a growth curve is to use a good vibratory roller. To construct the curve, an area the width of the roller in the middle of the mat is chosen and the roller is allowed to make one compaction pass. With the roller stopped some 30 feet away, a nuclear reading is taken and the outline of the gauge is marked on the pavement. The roller then makes a compaction pass in the opposite direction and another reading is taken. This scenario is continued until at least two (2) passes are made past the maximum peak density obtained.

The maximum laboratory density potential of a given mix is a direct function of the mix design air voids. Whereas, the actual maximum field density is a function of the type of coarse aggregates, natural or manufactured sands, lift thickness, roller type (static or vibratory), roller and paver speed, base condition, mix variation, etc. All of these items are taken into consideration with the growth curve.

1. High Density in the Growth Curve. If the growth curve indicates a maximum achievable field density of between 95 to 98 percent of the Theoretical Maximum Density (D), you can proceed with the Rolling Pattern. On the other hand, if the maximum achievable density is greater than 98 percent, a quick evaluation (by use of an extractor, hot bin gradations, nuclear asphalt determination, etc.) must be made of the mix. When adjustments are made in the mix, a new growth curve shall be constructed.
2. Low Density in the Growth Curve. If the growth curve indicates the maximum achievable density is below 94 percent, a thorough evaluation of the mix, rollers, and laydown operations should be made. After a thorough evaluation of all factors (mix, rollers, etc.), asphalt or gradation changes may be in order as directed by the Engineer. Again, any changes in the mix will require a new growth curve. Note that the nuclear density test is a quality control tool and not an acceptance test. All acceptance testing is to be conducted by the use of cores, unless otherwise specified.

3. Acceptance of Test Section. The Contractor may proceed with paving the day after the test section provided the following criteria have been met:
 - a. Four random locations (2 cores per location cut longitudinally and cored by the Contractor) will be selected by the Engineer within the test strip. All the cores must show a minimum of 94% density.
 - b. All Superpave and extraction test results from mix produced for the test section must be within the tolerances required by specification.
 - c. The Contractor shall correlate his nuclear gauge to the cores taken in the test section. Additional cores may be taken at the Contractor's expense for this purpose within the test section area, when approved by the Engineer.

4. Density Acceptance under Production Paving. The responsibility for obtaining the specified density lies with the Contractor. Therefore, it is important that the nuclear density gauge operator communicate with the roller operators to maintain the specified density requirements. The Contractor shall provide a qualified HMA Density Tester who has successfully completed the Department's "HMA Nuclear Density Testing Course" to run all required density tests on the job site. Density acceptance testing, unless otherwise specified, is described as follows:
 - a. The Contractor shall cut cores at random locations within 500 ton sublots as directed by the Resident Engineer.
 - b. The cores should be extracted so as not to damage them, since they are used to calculate the Contractor's pay.
 - c. The Engineer will run preliminary G_{mb} tests on the cores to give the Contractor an indication of how compaction is running for the next day's paving.
 - d. A running average of four (4) Maximum Theoretical Gravities (G_{mm}) will be used for calculating percent compaction.
 - e. Final core density tests and pay calculations will be performed by the Resident Engineer and delivered to the Contractor.
 - f. Should the contractor wish to resample the pavement as a result of pay calculations resulting in less than 100% payment the request must be made within 48 hours of receipt of the original payment calculation.

Steven J. Long, P.E. Acting Chief Engineer

Supersedes Policy Memorandum 2003-1 dated May 1, 2014

APPENDIX A

AGGREGATE BITUMINOUS BASE COURSE

Percentage by Weight Passing Sieves
Job Mix Formula (JMF)

Sieve Size	Gradation B Range 1" Maximum	Ideal Target
1-1/4 in.	---	---
1 in.	100	100
3/4 in.	93 – 97	95
1/2 in.	75 – 79	77
3/8 in.	64 – 68	66
No. 4	45 – 51	48
No. 8	34 – 40	37
No. 16	27 – 33	30
No. 30	19 – 23	21
No. 100	6 – 10	8
No. 200	4 – 6	5
Bitumen %:		
Stone	4.5 – 7.0	5.5

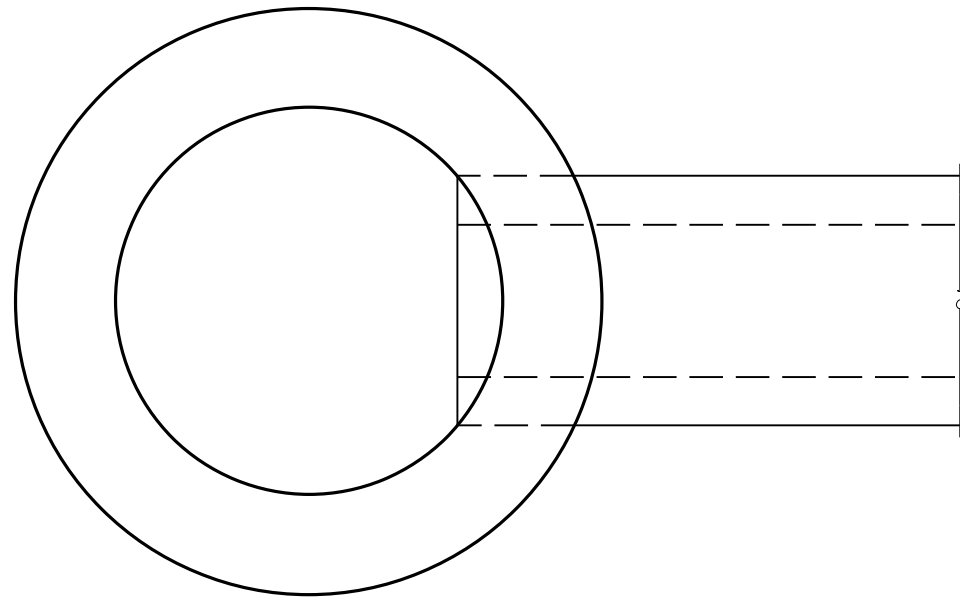
AGGREGATE BITUMINOUS SURFACE COURSE

Percentage by Weight Passing Sieves
Job Mix Formula (JMF)

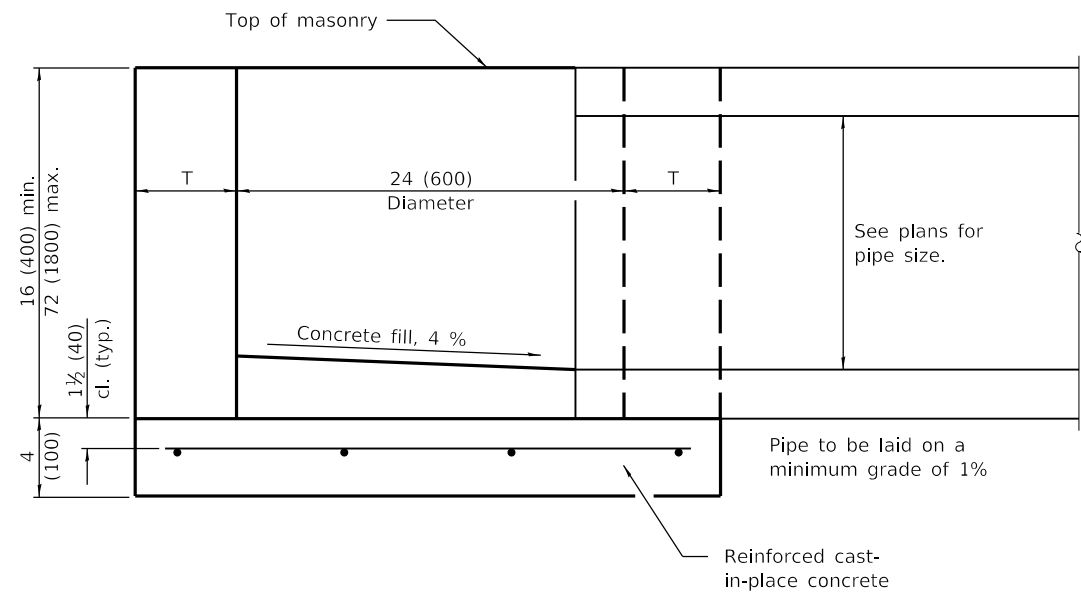
Sieve Size	Gradation B Range ¾" Maximum	Ideal Target
1 in.	100	---
¾ in.	100	100
½ in.	99 - 100	100
⅜ in.	91 - 97	94
No. 4	56 – 62	59
No. 8	36 - 42	39
No. 16	27 - 32	30
No. 30	19 - 25	22
No. 100	7 – 9	8
No. 200	5 – 7	6

Bitumen %:		
Stone	5.0 – 7.0	6.0

IDOT HIGHWAY STANDARDS

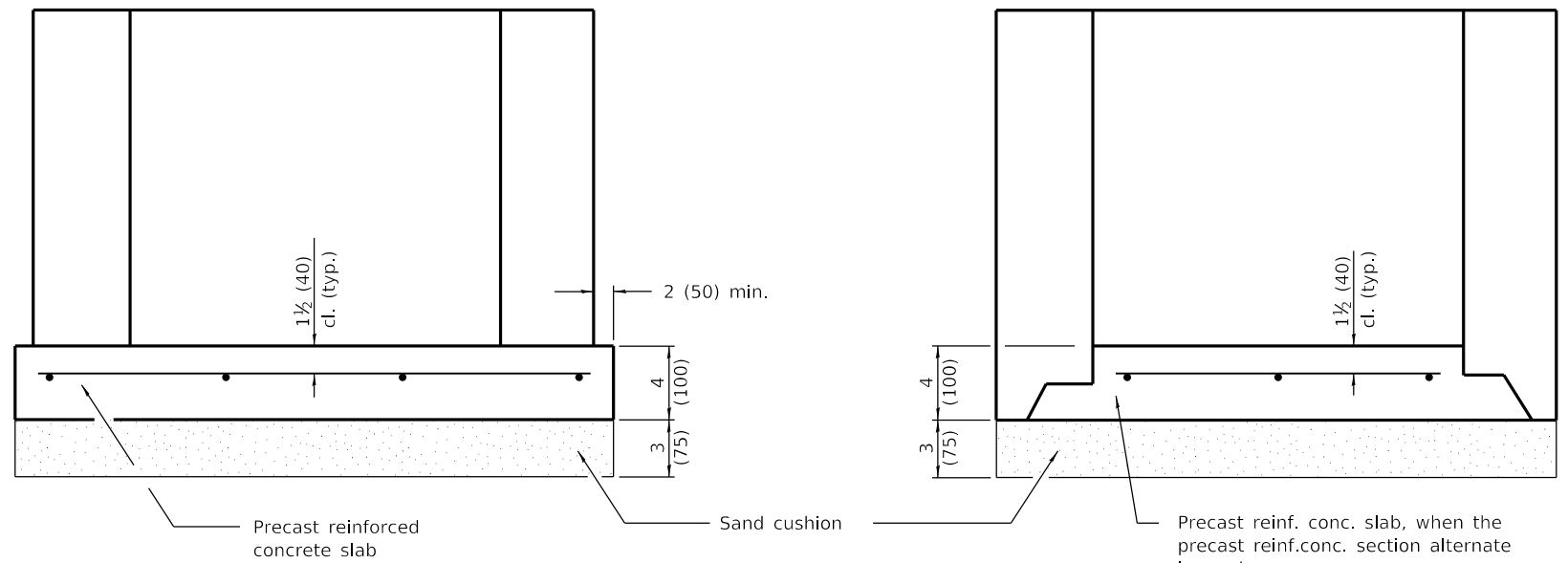


PLAN



ELEVATION

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8 (200)
CAST-IN-PLACE CONCRETE	6 (150)
CONCRETE MASONRY UNIT	5 (125)
PRECAST REINFORCED CONCRETE SECTION	3 (75)



ALTERNATE METHODS

GENERAL NOTES

Bottom slabs shall be reinforced with a minimum of 0.24 sq. in./ft. (510 sq. mm/m) in both directions with a maximum spacing of 10 (250).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-14	Increased height to 72 (1800) maximum.
1-1-11	Detailed rein. in slabs.
	Added max. limit to height.
	Added general notes.

INLET - TYPE A

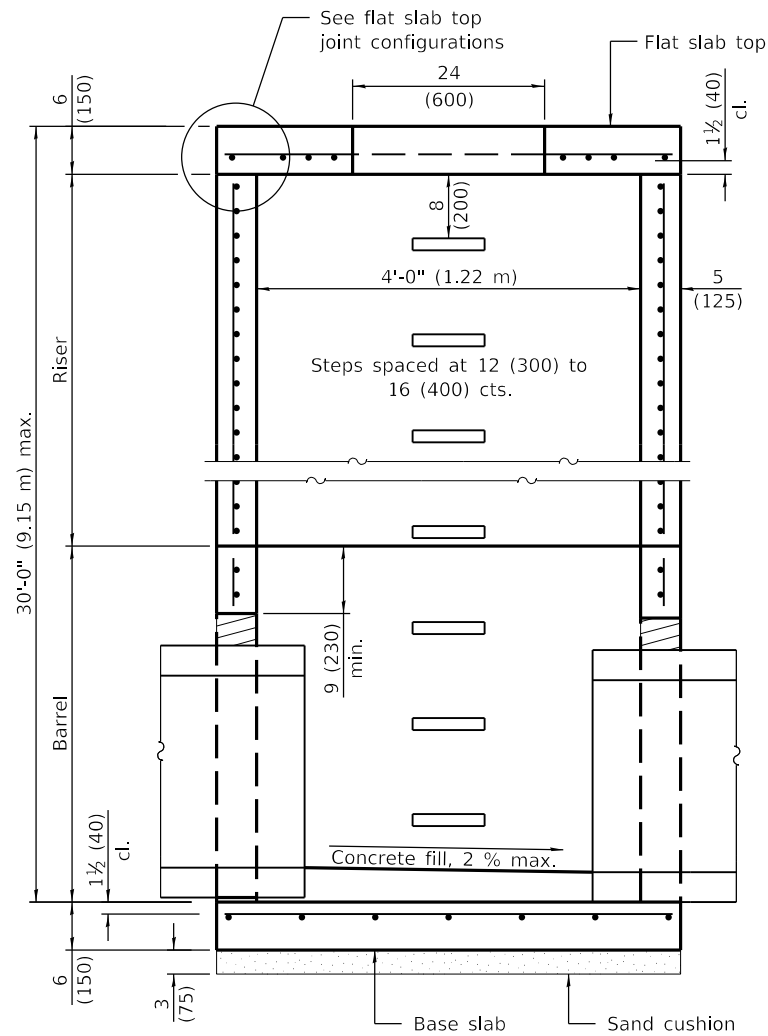
STANDARD 602301-04

Illinois Department of Transportation

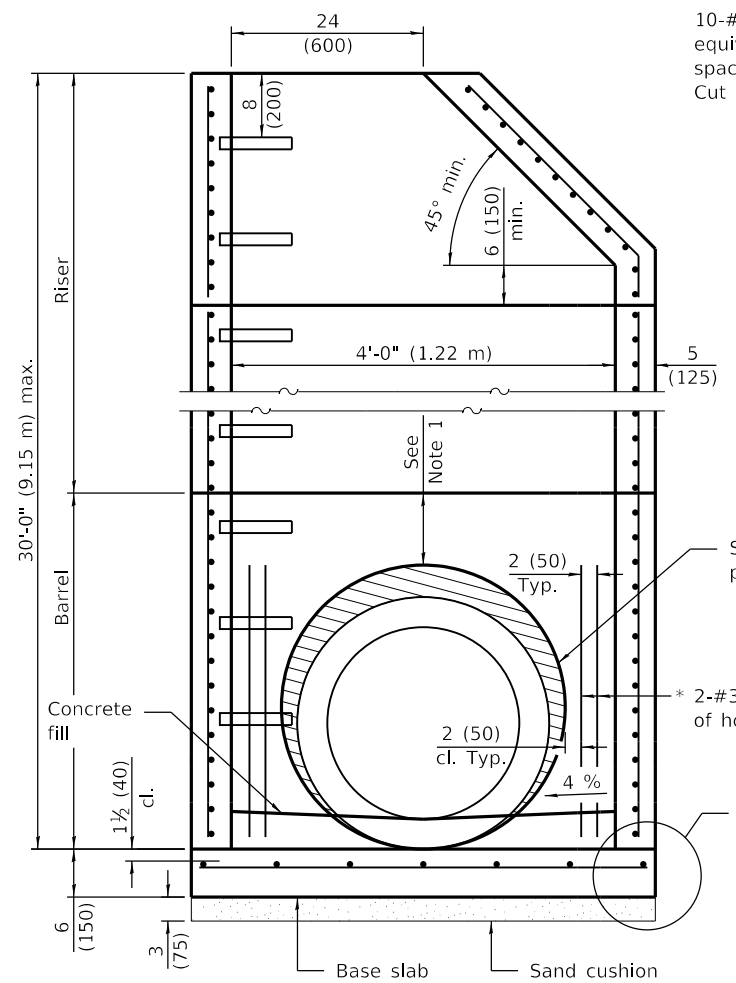
PASSED January 1, 2014
Michael Beard
 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2014
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



SECTION PARALLEL TO PIPE
(Without conical top riser)

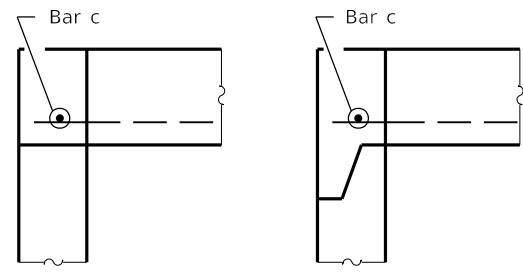


SECTION PERPENDICULAR TO PIPE
(With conical top riser)

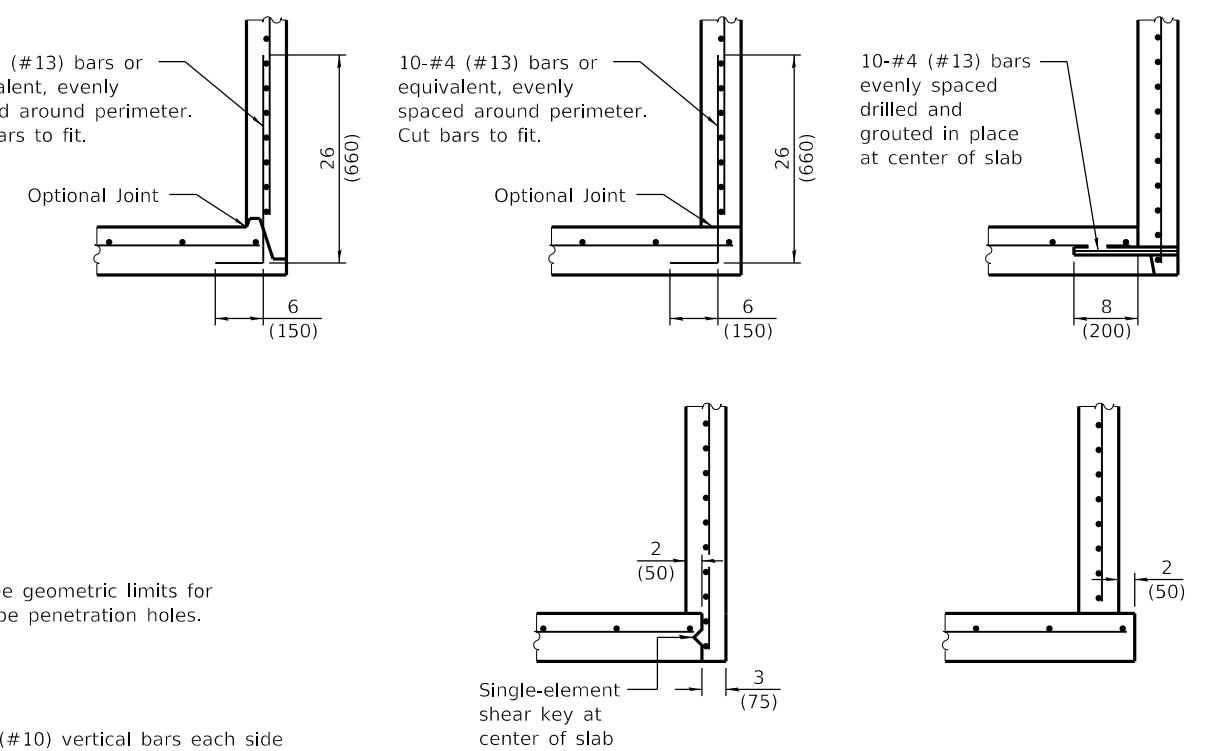
* As an alternate, the barrel wall reinforcement may be reduced to riser wall reinforcement with #3 (#10) bars placed around the pipe penetration holes as shown. This option may be utilized when the pipe penetration holes are formed as opposed to cored.

GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES

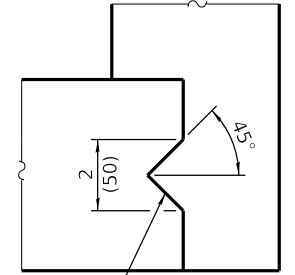
- Note 1: A minimum of 9 (230) of monolithic reinforced concrete shall be maintained above pipe penetration holes > 24 (600).
- Note 2: A minimum 12 (300) inside arc length of reinforced concrete shall be maintained between pipe penetration holes > 15 (380).
- Note 3: A maximum of 60 percent of the inside perimeter of the reinforced concrete manhole walls may be removed.
- Note 4: Horizontal joints that intersect pipe penetration holes > 15 (380) shall have one joint splice for every location around the perimeter of the joint where the inside arc length between pipe penetration holes is < 24 (600). See joint splice detail.
- Note 5: The recommended pipe penetration hole is equal to the O.D. of the pipe plus 4 (100).
- Note 6: Only pipe penetration holes ≤ 15 (380) are allowed in riser sections.



FLAT SLAB TOP JOINT CONFIGURATIONS
(Shown at access hole)



BASE SLAB JOINT CONFIGURATIONS



Single-element shear key at center of slab
SHEAR KEY GEOMETRY
(Reinforcement not shown for clarity)

GENERAL NOTES

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS
1-1-21	Revised Note 1 and lifting hole general note.
3-1-19	Moved wall reinforcement from inside face to middle.

PRECAST MANHOLE TYPE A
4' (1.22 m) DIAMETER
(Sheet 1 of 2)

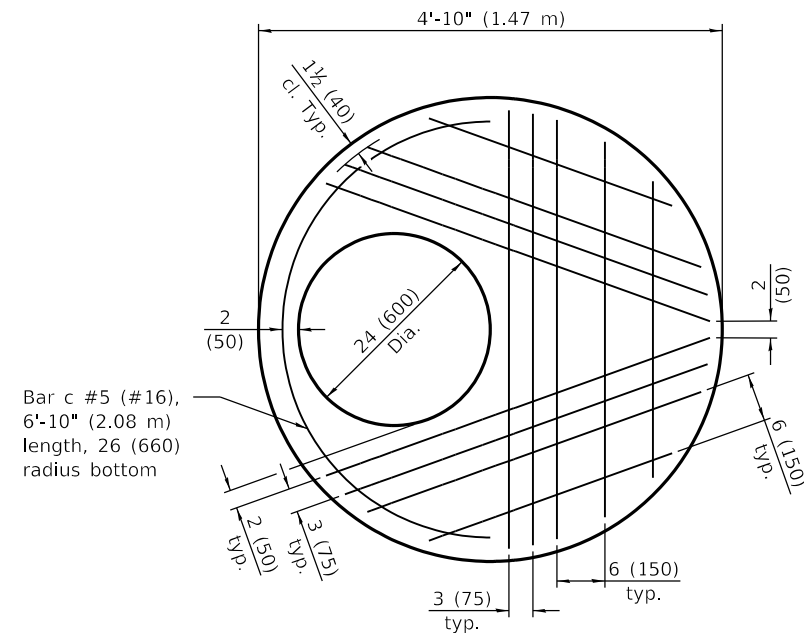
STANDARD 602401-07

Illinois Department of Transportation

PASSED January 1, 2021
Michael Bond
ENGINEER OF POLICY AND PROCEDURES

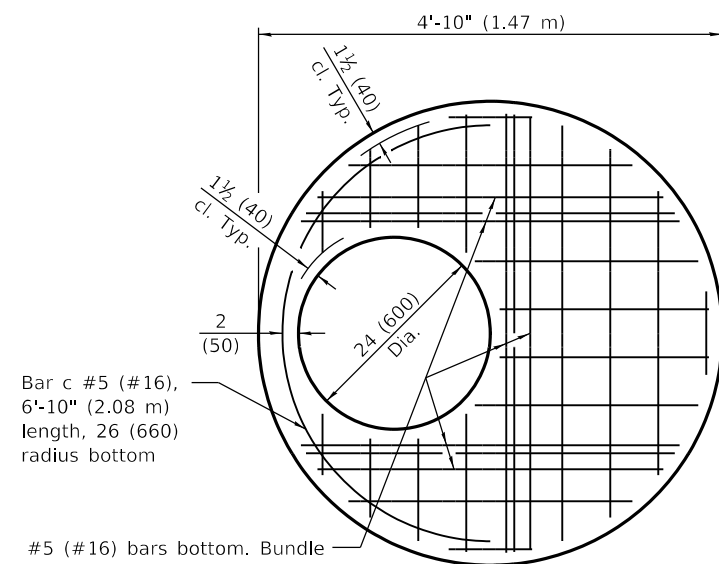
APPROVED January 1, 2021
John E. G.
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



PLAN - FLAT SLAB TOP

(Showing layout of reinforcement bars and c bars)



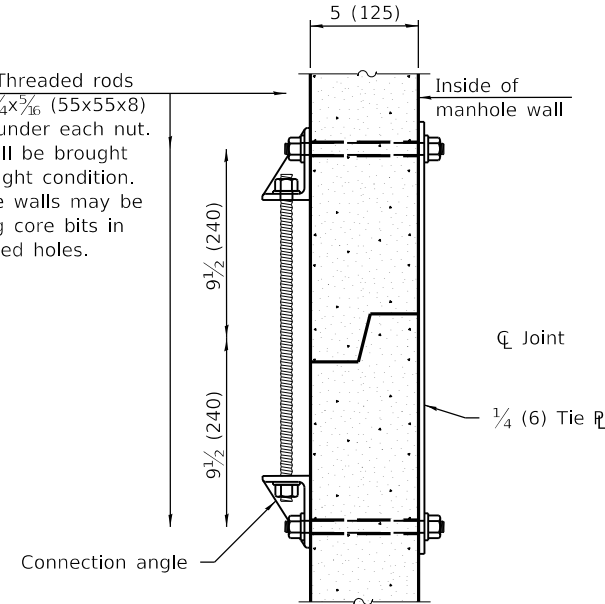
PLAN - FLAT SLAB TOP

(Showing layout of welded wire reinforcement and c bars)

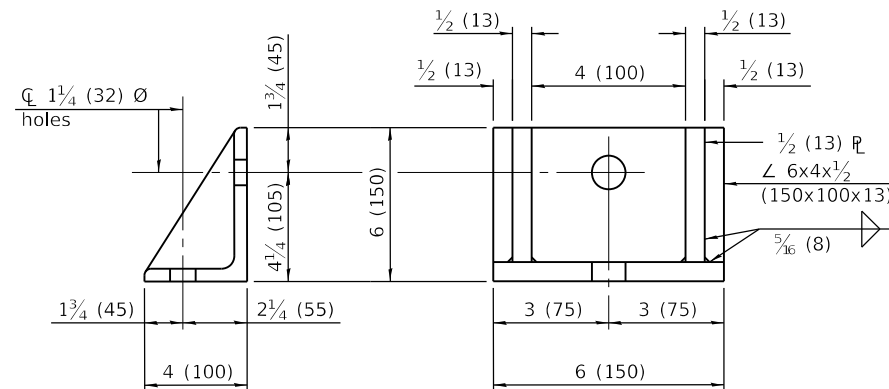
Bar c #5 (#16), 6'-10" (2.08 m) length, 26 (660) radius bottom

#5 (#16) bars bottom. Bundle first bar with closest WWR bar to the opening and place second bar ±3 (75) away.

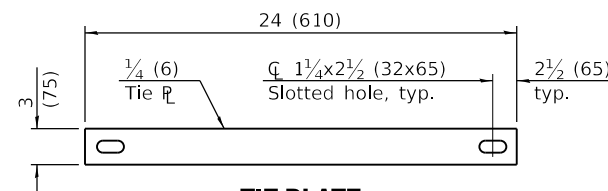
1 (25) Ø Threaded rods with 2 1/4 x 2 1/4 x 3/16 (55x55x8) washers under each nut. All nuts shall be brought to a snug tight condition. Holes in the walls may be drilled using core bits in lieu of formed holes.



JOINT SPLICE



CONNECTION ANGLE



TIE PLATE

FLAT SLAB TOP REINFORCEMENT

Location	WWR (each direction)		Rebar		
	A _s (min.)	Spacing (max.)	A _s (min.)	Spacing (max.)	Bar Size
Bottom Mat	** 0.62 sq. in./ft. (1312 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#5 (#16)

** Only one layer of WWR permitted to avoid congestion.

WALL REINFORCEMENT

Location	Orientation	WWR or Rebar	
		A _s (min.)	Spacing (max.)
Riser	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)
Barrel	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.16 sq. in./ft. (339 sq. mm/m)	4 (100)

BASE SLAB REINFORCEMENT

Location	Total Height	WWR or Rebar (each direction)	
		A _s (min.)	Spacing (max.)
Top Mat	≤ 20 ft. (6.10 m)	0.24 sq. in./ft. (508 sq. mm/m)	10 (250)
	> 20 ft. (6.10 m)	0.24 sq. in./ft. (508 sq. mm/m)	10 (250)

Illinois Department of Transportation

PASSED January 1, 2021

 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021

 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

PRECAST MANHOLE TYPE A
4' (1.22 m) DIAMETER

(Sheet 2 of 2)

STANDARD 602401-07