05A

Letting June 13, 2025

Notice to Bidders, Specifications and Proposal

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

Springfield, Illinois 62764

Contract No. PA067
Chicago Executive Airport
Wheeling, Illinois
Cook County
Illinois Project No. PWK-5161
SBG Project No. 3-17-SBGP-TBD

(Printed by authority of the State of Illinois)

Illinois Department of Transportation

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 June 13, 2025, 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. PA067
   Chicago Executive Airport
   Wheeling, Illinois
   Cook County
   Illinois Project No. PWK-5161
   SBG Project No. 3-17-SBGP-TBD

   Reconfigure Taxiway E

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

3. **INSTRUCTIONS TO BIDDERS**.

   (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 10-23 of the Standard Specifications for Construction of Airports (Adopted March 22, 2023), become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

   (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.

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

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

6. **DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 8.0%.

7. **SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Standard Specifications for Construction of Airports (Adopted March 22, 2023), the Special Provisions dated April 18, 2025, and the Construction Plans dated April 18, 2025 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 36 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

Gia Biagi,
Acting 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: January 2, 2025

1. OVERVIEW AND GENERAL 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 in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.

2. CONTRACTOR ASSURANCE. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.

3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 8.0% 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 in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.

4. IDENTIFICATION OF CERTIFIED DBE. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.

5. BIDDING PROCEDURES. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.

(a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.

(b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall 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 bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. In the event the bid is declared non-responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

6. UTILZATION PLAN EVALUATION. 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 the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot meet the goal, in order for the Department to 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 Department determines, based upon the documentation submitted, that the bidder has made a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

   If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

7. CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs 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 firms. 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 guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.

8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.

   (a) NOTICE OF DBE PERFORMANCE. The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.

   (b) SUBCONTRACT. If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed 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.

   (c) PAYMENT TO DBE FIRMS. 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 goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.

   (d) FINAL PAYMENT. After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment 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 (form SBE 2115) to the Engineer. 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.

(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.

SPECIAL PROVISION FOR WEEKLY DBE TRUCKING REPORTS (BDE)
Effective: June 2, 2012
Revised: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) to the Resident Engineer on Division of Aeronautics Form "AER 723" within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Subcontractor and Disadvantaged Business Enterprise Payment Reporting

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

(a) first tier subcontractors;

(b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;

(c) material suppliers or trucking firms that are part of the Contractor's submitted DBE utilization plan.

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

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

EQUAL EMPLOYMENT OPPORTUNITY

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

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

(1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

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

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

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

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

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

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

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

STATEMENTS AND PAYROLLS

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

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

SPECIAL PROVISION FOR NPDES CERTIFICATION

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

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

The Airport Owner or its Agent will:

1) prepare, sign and submit the Notice of Intent (NOI)

2) conduct site inspections and complete and file the inspection reports

3) submit Incidence of Non-Compliance (ION) forms

4) submit Notice of Termination (NOT) form

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

SPECIAL PROVISION FOR COMPLETION TIME VIA CALENDAR DAYS

It being understood and agreed that the completion within the time limit is an essential part of the contract, the bidder agrees to complete the work within 36 calendar days, unless additional time is granted by the Engineer in accordance with the provisions of the specifications. In case of failure to complete the work on or before the time named herein, or within such extra time as may have been allowed by extensions, the bidder agrees that the Department of Transportation shall withhold from such sum as may be due him/her under the terms of this contract, the costs, as set forth in Section 80-09 Failure to Complete on Time of the Standard Specifications, which costs shall be considered and treated not as a penalty but as damages due to the State from the bidder by reason of the failure of the bidder to complete the work within the time specified in the contract.

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

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

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

SPECIAL PROVISION FOR SUBMISSION OF BIDDERS LIST INFORMATION (BDE)
Effective: January 2, 2025
Revised: March 2, 2025

In accordance with 49 CFR 26.11(c) all DBE and non-DBEs who bid as prime contractors and subcontractors shall provide bidders list information, including all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor.

The bidders list information shall be submitted with the bid using the link provided within the “Integrated Contractor Exchange (iCX)” application of the Department’s “EBids System”.

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
SECTION 80 PROSECUTION AND PROGRESS

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

80-09 Failure to complete on time.

ADD:

Schedule of Deductions for Each Day of Overrun in Contract Time			
Original 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 March 22, 2023) and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

90-07 Partial payments.

DELETE: The entire section.

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

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

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

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

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

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

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

90-09 Trust agreement option.

DELETE: The entire section.

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

A1 ACCESS TO RECORDS AND REPORTS

A1.1 CONTRACT CLAUSE

ACCESS TO RECORDS AND REPORTS

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

A2 AFFIRMATIVE ACTION REQUIREMENTS

A2.1 SOLICITATION CLAUSE

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

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

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

Timetables

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

Economic Area	Goal (percent)
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 - 9.1
IL - Kankakee

Non-SMSA Counties 18.4
IL - Bureau, DeKalb, Grundy, Iroquois, Kendall, LaSalle, Livingston, Putnam
IN - Jasper, Laporte, Newton, Pulaski, Starke

084 Champaign - Urbana, IL:
SMSA Counties:
1400 Champaign - Urbana - Rantoul, IL - 7.8
IL - Champaign

Non-SMSA Counties - 4.8
IL - Coles, Cumberland, Douglas, Edgar, Ford, Piatt, Vermilion

085 Springfield - Decatur, IL:
SMSA Counties:
2040 Decatur, IL - 7.6
IL - Macon

7880 Springfield, IL - 4.5
IL - Menard, Sangamon

Non-SMSA Counties 4.0
IL - Cass, Christian, Dewitt, Logan, Morgan, Moultrie, Scott, Shelby

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 - 2.5
IL - McLean

6120 Peoria, IL - 4.4
IL - Peoria, Tazewell, Woodford

Non-SMSA Counties - 3.3
IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren

088 Rockford, IL:
SMSA Counties:
6880 Rockford, IL - 6.3
IL - Boone, Winnebago

Non-SMSA Counties - 4.6
IL - Lee, Ogle, Stephenson

098 Dubuque, IA:
Non-SMSA Counties - 0.5
IL - JoDaviess
IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik
WI - Crawford, Grant, Lafayette

099 Davenport, Rock Island, Moline, IA - IL:
SMSA Counties:
1960 Davenport, Rock Island, Moline, IA - IL - 4.6
IL - Henry, Rock Island
IA - Scott

Non-SMSA Counties - 3.4
IL - Carroll, Hancock, Henderson, Mercer, Whiteside
IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine
MO - Clark

107 St. Louis, MO:
SMSA Counties:
7040 St. Louis, MO - IL - 14.7
IL - Clinton, Madison, Monroe, St. Clair
MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City

Non-SMSA Counties - 11.4
IL - Alexander, Bond, Calhoun, Clay, Effingham, Fayette, Franklin, Greene,

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

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

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

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

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

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

A3 BREACH OF CONTRACT TERMS

A3.1 CONTRACT CLAUSE

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

BREACH OF CONTRACT TERMS

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

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

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

A4 BUY AMERICAN PREFERENCE

A4.1 SOLICITATION CLAUSES

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

FAA BUY AMERICAN PREFERENCE

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

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

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

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

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

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

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

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

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

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

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

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

a) Only installing iron, steel and manufactured products produced in the United States;

b) Only installing construction materials defined as: an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber or drywall that have been manufactured in the United States.

c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or

d) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

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

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

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

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

Required Documentation

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

a) Completed Content Percentage Worksheet and Final Assembly Questionnaire

b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;

c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

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

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

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

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

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

Date	Signature
Company Name	Title

A5 CIVIL RIGHTS - GENERAL

A5.1 CONTRACT CLAUSES

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

GENERAL CIVIL RIGHTS PROVISIONS

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

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

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

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

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.1 CONTRACT CLAUSE

A6.1.1 Title VI Solicitation Notice

Title VI Solicitation Notice:

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

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

Title VI List of Pertinent Nondiscrimination Acts and Authorities

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

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

A6.1.3 Nondiscrimination Requirements/Title VI Clauses for Compliance

Compliance with Nondiscrimination Requirements:

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

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

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

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.1 CONTRACT CLAUSE

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

CLEAN AIR AND WATER POLLUTION CONTROL

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

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

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.1 CONTRACT CLAUSE

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

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

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

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

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

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

3. Withholding for Unpaid Wages and Liquidated Damages.

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

4. Subcontractors.

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

A9 COPELAND "ANTI-KICKBACK" ACT

A9.1 CONTRACT CLAUSE

COPELAND "ANTI-KICKBACK" ACT

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

A10 DAVIS-BACON REQUIREMENTS

A10.1 CONTRACT CLAUSE

DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

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

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

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

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

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

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

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

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

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

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

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

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

3. Payrolls and Basic Records.

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

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

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

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

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

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

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

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

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

4. Apprentices and Trainees.

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

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

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

5. Compliance with Copeland Act Requirements.

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

6. Subcontracts.

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

7. Contract Termination: Debarment.

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

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

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

9. Disputes Concerning Labor Standards.

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

10. Certification of Eligibility.

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

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

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

A11 DEBARMENT AND SUSPENSION

A11.1 CERTIFICATION CLAUSES

A11.1.1 Bidder or Offeror Certification

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

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

A11.1.2 Lower Tier Contract Certification

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

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

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

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

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

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

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.1 REQUIRED PROVISIONS

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

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

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

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

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

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

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

DISADVANTAGED BUSINESS ENTERPRISES

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

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

A13 DISTRACTED DRIVING

A13.1 CONTRACT CLAUSE

TEXTING WHEN DRIVING

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

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

A14 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

A14.1 CONTRACT CLAUSE

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

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

A15 EQUAL EMPLOYMENT OPPORTUNITY (EEO)

A15.1 MANDATORY CONTRACT CLAUSE

A15.1.1 EEO Contract Clause

EQUAL OPPORTUNITY CLAUSE

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

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

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

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

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

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

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

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

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

A15.1.2 EEO Specification

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;

c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;

d. "Minority" includes:

(1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A16 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

A16.1 SOLICITATION CLAUSE

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

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

A17 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

A17.1 CERTIFICATION CLAUSE

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

CERTIFICATION REGARDING LOBBYING

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

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

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

A18 PROHIBITION of SEGREGATED FACILITIES

A18.1 CONTRACT CLAUSE

PROHIBITION of SEGREGATED FACILITIES

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

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

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

A19 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A19.1 CONTRACT CLAUSE

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

A20 PROCUREMENT OF RECOVERED MATERIALS

A20.1 CONTRACT CLAUSE

PROCUREMENT OF RECOVERED MATERIALS

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

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

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

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

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

a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;

b) Fails to meet reasonable contract performance requirements; or

c) Is only available at an unreasonable price.

A21 RIGHT TO INVENTIONS

A21.1 CONTRACT CLAUSE

RIGHTS TO INVENTIONS

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

A22 SEISMIC SAFETY

A22.1 CONTRACT CLAUSE

A22.1.1 Construction Contracts

SEISMIC SAFETY

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

A23 TAX DELINQUENCY AND FELONY CONVICTIONS

A23.1 CERTIFICATION CLAUSE

CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

Certifications

1) The applicant represents that it is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2) The applicant represents that it is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

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

Term Definitions

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

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

A24 TERMINATION OF CONTRACT

A24.1 CONTRACT CLAUSE

A24.1.1 Termination for Convenience

TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

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

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

Owner agrees to pay Contractor for:

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

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

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

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

A24.1.2 Termination for Default

TERMINATION FOR CAUSE (CONSTRUCTION)

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

A25 TRADE RESTRICTION CERTIFICATION

A25.1 SOLICITATION CLAUSE

TRADE RESTRICTION CERTIFICATION

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

1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);

2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and

3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

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

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

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

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

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

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

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

A26 VETERAN'S PREFERENCE

A26.1 CONTRACT CLAUSE

VETERAN'S PREFERENCE

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

A27 DOMESTIC PREFERENCES FOR PROCUREMENTS

A27.1 CERTIFICATION CLAUSE

CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS

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

SECTION III

Special Provisions

For

RECONFIGURE TAXIWAY E

ILLINOIS PROJECT: PWK-5161
S.B.G. PROJECT: 3-17-SBGP-TBD

at

CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS

IDOT LETTING: JUNE 13, 2025

Final Submittal

April 18, 2025

Date Signed: 04/18/2025
Expiration Date: 11/30/2025

Prepared By:

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

20092262-00

GENERAL

These Special Provisions, together with applicable Standard Specifications, Rules and Regulations, Contract Requirements for Airport Improvement Projects, Payroll Requirements and Minimum Wage Rates which are hereto attached or which by reference are herein incorporated, cover the requirements of the State of Illinois, Department of Transportation, Division of Aeronautics for the construction of the subject project at the Chicago Executive Airport, Wheeling/Prospect Heights, Illinois.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The "Illinois Standard Specifications for Construction of Airports", adopted March 22, 2023, State of Illinois Department of Transportation, Division of Aeronautics shall govern the project except as otherwise noted in these Special Provisions. In cases of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern. When noted within the Special Provisions, the Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022, shall also apply.

INDEX TO SPECIAL PROVISIONS

IDA POLICY MEMORANDA – APPENDIX A INDEX

PART 1 – GENERAL CONTRACT PROVISIONS

SECTION 40 – SCOPE OF WORK

40-05 MAINTENANCE OF TRAFFIC

ADD:

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

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

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

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

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

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

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

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

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

40-09 SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)

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

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

ADD: New section:

40-10 BARRICADES, WARNING SIGNS AND HAZARD MARKINGS.

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

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

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

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

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

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

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

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

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

Mark and identify vehicles in accordance with AC 150/5210-5 (latest revision) *Painting, Marking, and Lighting of Vehicles Used on an Airport.* When any vehicle is required to travel over any portion of the aircraft movement area (within the existing perimeter fence) and runway approach area, the vehicle shall be properly identified to operate in the area or provided with a flag on a staff attached to the vehicle so that the flag will be readily visible. The flag should be not less than 3-feet square consisting of a checkered pattern of international orange and white squares of not less than one foot on each side and displayed in full view above the vehicle. A flag or escort vehicle is not required for vehicles which have been painted, marked and lighted for routine use on aircraft movement areas. Any vehicle operating on the movement area during the hours of darkness should be equipped with an amber flashing 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 2nd paragraph to read:

The Contractor shall plan and conduct their 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 re-establishment of survey control shall be by a State Licensed Land Surveyor.

DELETE: The 2nd paragraph.

ADD: As the 2nd 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 they shall be required to make the necessary corrections before the stakes are used for construction purposes.

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

50-10 LOAD RESTRICTIONS

ADD:

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

the Contractor at his own expense to the satisfaction of the Owner. **The Contractor shall 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 the 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.

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 perform an inspection.

ADD: After the first sentence of the 2nd 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 2nd sentence of the 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:	**Chicago Executive Airport**
PROJECT TITLE:	**Reconfigure Taxiway E**
PROJECT NUMBERS:	**IL Project: PWK-516**1
CONTRACT ITEM:	**(i.e. AR156520 Inlet Protection)**
SUBMITTED BY:	**(Contractor/Subcontractor Name)**
DATE:	**(Date Submitted)**

ADD: To the end of the 2nd last 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 3rd 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 11th 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 6th 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 RELATIONS AND RESPONSIBILITY TO PUBLIC

70-08 PUBLIC CONVENIENCE AND SAFETY

ADD: At end of the Section:

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

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

REVISE: The 2nd paragraph as follows:

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

ADD: After the 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.

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

CHICAGO EXECUTIVE AIRPORT

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

REPLACE: Paragraph 11th 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 cables at the airport. The approximate location of existing underground cable is shown in drawings. Any airfield lights or cable that are broken and require replacement because of the Contractor's operations will be replaced by the Contractor at his/her own expense.

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

70-25 CONTRACTOR'S RESPONSIBILITY FOR SAFETY DURING CONSTRUCTION

ADD:

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

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

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

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

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

j. Ensure that no construction employees, employees of subcontractors or suppliers, or other people enter any part of the aircraft operations area from construction site unless authorized.

SECTION 80 – PROSECUTION AND PROGRESS

80-04 LIMITATION OF OPERATIONS

ADD: After the 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.

80-07 TEMPORARY SUSPENSION OF THE WORK

REVISE the 2nd paragraph to read:

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

80-08 DETERMINATION AND EXTENSION OF CONTRACT TIME

ADD: After the 4th paragraph:

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

ADD: After the last paragraph of this section:

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

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

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

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

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

No allowance will be made for anticipated profits.

ADD: The following section:

80-14 CONTRACTOR'S ACCESS TO AIRFIELD

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

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

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

ADD: The following section:

80-15 SECURITY DURING CONSTRUCTION

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

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

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

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

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

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

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

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

SECTION 90 – MEASUREMENT AND PAYMENT

90-06 PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT

ADD the following to subsection B.6. Statements:

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

PART 2 – GENERAL CONSTRUCTION ITEMS

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

MATERIALS

102-2.1 GRASS

REVISE to read:

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

102-2.9 INLET AND PIPE PROTECTION

ADD:

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

METHOD OF MEASUREMENT

DELETE: Sections 102-4.1 through 102-4.3, 102-4.6, 102-4.7, 102-4.9 and 102-4.10.

102-4.4

REVISE:

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

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 and haul route shall not be measured for payment but shall be considered incidental to the contract.

BASIS OF PAYMENT

102-5.1

REVISE: This section to read:

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

Payment will be made under:

ITEM AR156510 SILT FENCE – PER FOOT.
ITEM AR156520 INLET PROTECTION – PER EACH.

ITEM 105 – MOBILIZATION

DESCRIPTION

105-1.1

REVISE the 3rd paragraph to read:

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

BASIS OF PAYMENT

105-3.1

ADD:

Payment will be made under:

ITEM AR150520 MOBILIZATION – PER LUMP SUM.

ITEM 150 – RESIDENT ENGINEER FIELD OFFICE

CONSTRUCTION METHODS

150-2.1

REVISE: First sentence to read:

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

REVISE:

Paragraph (h.) to the following:

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

DELETE: (m.)

ADD:

(m.) One first-aid cabinet fully equipped.

(n.) One (1) 800 Watt, 0.8 cubic foot microwave oven.

(o.) One (1) Coffee Maker

(p.) Solid waste disposal consisting of two (2) 28-quart waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

(q.) One (1) internet access account for use by the Engineer with a minimum advertised download speed of up to 768 Kbps and a minimum advertised upload speed of up to 384 Kbps. The type of internet access chosen by the Contractor shall allow for simultaneous use of the internet connection, landline telephone, and facsimile machine. Any required modems, broadband cards or other equipment needed for connecting a desktop or laptop computer to the type of internet connection selected by the Contractor shall also be provided by the Contractor.

BASIS OF PAYMENT

150-4.1

ADD:

Payment will be made under:

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

PART 3 – SITEWORK

ITEM 101 – PREPARATION/REMOVAL OF EXISTING PAVEMENTS

DESCRIPTION

101-1.1

ADD:

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

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

CONSTRUCTION

101-3.1 REMOVAL OF EXISITNG PAVEMENT

ADD to (a.) Concrete pavement removal:

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

ADD to (b.) Asphalt pavement removal:

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

METHOD OF MEASUREMENT

DELETE: Sections 101-4.2 through 101-4.4, 101-4.6, and 101-4.7.

BASIS OF PAYMENT

101-5.1

ADD:

Payment will be made under:

ITEM AR401900 REMOVE BITUMINOUS PAVEMENT – PER SQUARE YARD.
ITEM AR501900 REMOVE PCC PAVEMENT – PER SQUARE YARD.

ITEM 152 – EXCAVATION, SUBGRADE, AND EMBANKMENT

DESCRIPTION

152-1.1 GENERAL

ADD:

A site investigation was completed at the Northeast Quadrant compensatory storage. The recommendation of the report is that the topsoil encountered are suitable to be considered "Uncontaminated Soil" and are recommended as Clean Construction Demolition Debris. A copy of the environmental report revised March 20, 2025, is included in Appendix B, which includes the Illinois Environmental Protection Agency (IEPA) Uncontaminated Soil Certification LPC-663 form for the boring performed at the Northeast Quadrant compensatory storage. Analytical report and the EDR Radius Map report with Geocheck for the samples will be provided upon request. All excess topsoil excavated at the Northeast Quadrant compensatory storage location shall be hauled offsite. All excess clay material shall be stockpiled at the locations noted on the plans or as directed by the Engineer at no additional cost to the contract.

A site investigation was completed at the Taxiway E/new Taxiway K4 site. The recommendation of the report is that the soils encountered are not suitable to be considered "Uncontaminated Soil" and are not recommended as Clean Construction Demolition Debris. A copy of the environmental report revised March 20, 2025, is included in Appendix B. Analytical report and the EDR Radius Map report with Geocheck for the samples will be provided upon request. All excess topsoil and clay materials at the Taxiway E/new Taxiway K4 site shall be stockpiled at the locations noted on the plans or as directed by the Engineer at no additional cost to the contract.

Compaction control tests shall be in accordance with AASHTO T 180 for areas designated for aircraft with gross weights greater than 60,000 pounds. A new proctor shall be developed for each soil type based on visual classification.

152-1.2 DIGITAL TERRAIN MODEL (DTM)

DELETE: This section and replace with the following:

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

152-1.3 CLASSIFICATION

DELETE: Paragraphs b, c, and d.

ADD: New section:

152-1.6 CLEAN CONSTRUCTION OR DEMOLITION DEBRIS

PROJECT CONDITIONS

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

B. Material Sampling and Analysis:

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

REGULATORY REQUIREMENTS

A. The Contractor shall comply with all applicable local, state and federal laws and regulations with regard to material removal, handling and disposal, and shall pay all assessed costs and fees.

B. The Contractor shall comply with the Illinois Environmental Protection Act, as amended by Public Act 096-1416 that was signed in to law on July 30, 2010, Public Act 097-0137 that was signed in to law on July 14, 2011, and all applicable amendments of the Illinois Environmental Protection Act.

SUBMITTALS

A. Contractor shall submit a Clean Construction or Demolition Debris (CCDD) & Soil Removal and Disposal Plan to the Engineer. Submit the following as a minimum:

1. A list of all construction or demolition debris anticipated to be generated requiring disposal.

2. The anticipated quantity (both in tons and in cubic yards) of construction or demolition debris to be disposed of and identification of disposal facility including address and contact information.

3. The anticipated quantity (both in tons and in cubic yards) of surplus soil to be disposed of, and identification of disposal facility including address and contact information.

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

1. Proposed Testing Program to establish that the surplus soil is uncontaminated, for compliance with the requirements of the Illinois Environmental Protection Act. Include details of intended testing program, and rate of sampling (number of samples based on total quantity of surplus soil generated).

2. Credentials of the testing Lab that will perform the testing, and credentials of the Illinois Licensed Professional Engineer or Illinois Licensed Professional Geologist that will complete all required certification forms.

3. Results of the Proposed Testing Program.

4. If further CCDD testing is deemed necessary by the Contractor's chosen disposal facility, the Contractor shall complete this testing at no additional cost to the contract.

GENERAL

A. The following work shall be included:

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

MATERIAL CHARACTERIZATION FOR OFFSITE DISPOSAL

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

CONSTRUCTION METHODS

152-3.1 GENERAL

REVISE: Paragraph (a) to read:

Blasting will not be permitted.

152-3.2 EXCAVATION

ADD:

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

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

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

152-3.10 COMPACTION REQUIREMENTS

ADD after the 4th paragraph:

In cut sections NOT requiring porous granular embankment, if necessary, the Contractor shall take the following steps in an effort to obtain not less than 100% for non-cohesive soils, and 95% for cohesive soils of the modified laboratory density in the subgrade.

A. Step 1. Cut plan ditches which drain the area at least to grade. This shall be done at least two weeks prior to Step 2.

B. Step 2. Air dry the top 200mm (8-inches) of subgrade. This procedure shall include at least two 200 m (8 inch) depth processing utilizing discs or tillers each day for 3 consecutive days with acceptable weather to dry the material.

C. Steps 3. Recompact the layer processed in Step 2 to achieve not less than 100% maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils, or until at least 9 passes of a roller which has demonstrated ability to obtain the density on adjacent earthwork have been made.

In cut sections requiring the use of porous granular embankment, the proposed subgrade shall be compacted to the satisfaction of the Resident Engineer.

152-3.15 TOPSOIL

REVISE the second sentence of paragraph one to the following:

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

ADD:

Any excess topsoil material at the Northeast Quadrant compensatory storage location shall be hauled offsite at no additional cost to the contract.

ADD: New Section:

152-3.19 DUST CONTROL WATERING

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

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

METHOD OF MEASUREMENT

152-4.1 GENERAL

DELETE: 152-4.1b. Embankment.

ADD:

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

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

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".

Payment will be made under:

ITEM AR152410 UNCLASSIFIED EXCAVATION – PER CUBIC YARD.
ITEM AR152540 SOIL STABILIZATION FABRIC – PER SQUARE YARD.

ITEM 154 – SUBBASE COURSE

MATERIALS

154-2.1 DESCRIPTION

REVISE: First paragraph to read:

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

154-2.3 GRADATION REQUIREMENTS

DELETE: This section.

ADD:

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

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

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

Subbase Gradation Requirements

Sieve	Percent Passing	
8 inch	-	100
6 inch	-	94-100
4 inch	-	80-100
3 inch	100	-
2 inch	-	20-70
1 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 PLACEMENT

DELETE: This section.

ADD:

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

154-3.5 COMPACTION

DELETE: This section.

ADD:

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

Capping aggregate will not be required when embankment meeting the requirements of Item 209 of the Standard Specifications is placed on top of the subbase course. Capping aggregate (two (2) inch depth) meeting the requirements of Item 154 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 Porous Granular Embankment shall be the number of cubic yards as measured by the Engineer at the specified thickness of the material placed. If required, the thickness of PGE measured for payment will include the thickness of the capping stone.

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

154-5.1

DELETE: This Section.

ADD:

Payment for porous granular embankment 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

DESCRIPTION

209-1.1

ADD:

This item shall also consist of 6 and 18 inches of crushed aggregate base course placed as detailed in the plans or as directed by the Resident Engineer.

MATERIALS

209-2.1 CRUSHED AGGREGATE BASE

DELETE: Paragraph C; Crushed slag.

CONSTRUCTION METHODS

209-3.9 ACCEPTANCE SAMPLING AND TESTING

REVISE: First 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 greater than 60,000 pounds.

BASIS OF PAYMENT

209-5.1

ADD:

Payment will be made under:

ITEM AR209606 CRUSHED AGG. BASE COURSE – 6" – PER SQUARE YARD.
ITEM AR209614 CRUSHED AGG. BASE COURSE – 14" – PER SQUARE YARD.

PART 6 – FLEXIBLE PAVEMENTS

ITEM 401 – ASPHALT MIX PAVEMENT SURFACE COURSE

DESCRIPTION

401-1.1

ADD:

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

MATERIALS

401-2.3 ASPHALT BINDER

ADD: The following after the first 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 60,000 pounds or more (Runway/Taxiway) criteria shall apply. Target air voids (AV) shall be 3.0% for the mixture.

CONSTRUCTION METHODS

401-4.10 JOINTS

ADD: After the first paragraph of this section:

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

MATERIAL ACCEPTANCE

401-6.1 ACCEPTANCE SAMPLING AND TESTING

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

BASIS OF PAYMENT

401-8.1

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

ADD:

Payment will be made under:

ITEM AR401610 BITUMINOUS SURFACE COURSE – PER TON.

ITEM 403 – ASPHALT MIX PAVEMENT BASE COURSE

DESCRIPTION

403-1.1

ADD:

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

MATERIALS

403-2.3 ASPHALT BINDER

ADD: The following after the first paragraph of this section:

Asphalt Binder Selection Table – IDOT Districts 1-6 (Runway & Taxiway) 60,000 pounds or more criteria shall apply. Asphalt binder for top and bottom lifts shall be as shown on the plans.

COMPOSITION

403-3.3 JOB MIX FORMULA (JMF)

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

Asphalt Design Criteria Table - Aircraft 60,000 pounds or more (Runway/Taxiway) criteria shall apply. Target air voids (AV) shall be 3.0% for the mixture.

CONSTRUCTION METHODS

403-4.10 JOINTS

ADD: After the first paragraph of this section:

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

MATERIAL ACCEPTANCE

403-6.1 ACCEPTANCE SAMPLING AND TESTING

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

BASIS OF PAYMENT

403-8.1

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

ADD:

Payment will be made under:

ITEM AR403610 BITUMINOUS BASE COURSE – PER TON.

PART 7 – RIGID PAVEMENT

ITEM 501 – CEMENT CONCRETE PAVEMENT

DESCRIPTION

501-1.1

ADD:

This work shall also consist of concrete for PCC spall repair.

MATERIALS

501-2.12 MATERIAL FOR CURING CONCRETE

DELETE: Paragraphs (b) and (c).

501-2.13 EPOXY-RESIN

ADD:

All epoxy-resin mortar used for spall repairs shall be a two-component material conforming to the requirements of ASTM C881, Type III. Class as appropriate for each application technique to be encountered.

CONCRETE MIX

501-3.2 CONCRETE MIX PROPORTIONS

DELETE: All references to aircraft gross weights of 60,000 pounds or less.

ADD:

Concrete pavements will be designed to accommodate aircraft gross weights greater than 60,000 pounds.

CONSTRUCTION METHODS

501-4.4 BASE SURFACE PREPARATION PRIOR TO PLACEMENT

REVISE: First sentence to read:

The work shall be extended to at least 12 inches beyond each edge of the proposed pavement.

ADD:

The existing grade along the outer edges of the new pavement shall be improved, if necessary, to support the paver without noticeable displacement. Any grading, compacting, or furnishing and installing materials shall be considered incidental to the unit prices for paving and no separate payment will be made.

All areas shall be constructed true to grade and acceptable to the Engineer prior to paving.

If the underlying course has become over-saturated or unstable, paving operations shall stop until corrected unless otherwise approved by the Engineer.

501-4.10 JOINTS

DELETE: 2nd paragraph of **d.(3)(a) Contraction joints.**

ADD: To the end of the paragraph **d.(3)(c) Joints in hardened concrete**:

Protection of previously installed pavement edges and joints from slip-form operations shall be provided in the form of rubber mats or other means acceptable to the Engineer. The Contractor shall be required to place rubber mats (or other approved material) along the pavement edge prior to drilling dowel bar holes. In addition, any damage to the pavement caused by the drilling operation shall be repaired to the satisfaction of the Engineer at no additional cost to the contract.

501-4.13 CURING

ADD: To the end of the 2nd paragraph:

For slip-form paving, the approved curing media shall be applied uniformly to all surfaces of the pavement, including exposed edges. Membrane curing compounds shall be applied on all concrete surfaces from a suitable self-propelled mechanical application device, which bridges the fresh concrete, designed to provide a uniform application. Other curing systems will not be permitted.

Care shall be taken when this method of curing is used. Should conditions prevail such that curing material is being blown toward buildings or aircraft, appropriate measures shall be taken to eliminate the problems to the satisfaction of the Engineer. The curing membrane shall be sprayed as soon as possible without damage to the pavement surface. Excessive delays in application of the membrane resulting in shrinkage cracking will be cause for rejection of the affected pavement necessitating removal and replacement at no additional cost to the contract.

ADD: New Section:

501-4.22 RE-OPENING TO AIRCRAFT TRAFFIC

The Contractor shall take additional beams and test them as required to demonstrate the concrete strength at no additional cost to the contract. Prior to opening the pavement to construction traffic, all joints shall be sealed.

BASIS OF PAYMENT

ADD:

Payment will be made under:

ITEM AR501510 10" PCC PAVEMENT – PER SQUARE YARD.
ITEM AR501530 PCC TEST BATCH – PER EACH.
ITEM AR800009 PCC SPALL REPAIR – PER SQUARE FOOT.

PART 9 – MISCELLANEOUS

ITEM 602 – EMULSIFIED ASPHALT PRIME COAT

CONSTRUCTION METHODS

602-3.4 APPLICATION OF EMULSIFIED ASPHALT MATERIAL

ADD: The following to the 2nd paragraph:

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

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 bituminous tack coat between lifts of bituminous pavement as part of the proposed pavement structure at the locations shown on the plans.

BASIS OF PAYMENT

603-5.1

ADD:

Payment will be made under:

ITEM AR603510 BITUMINOUS TACK COAT – PER GALLON.

ITEM 605 – JOINT SEALANTS FOR PAVEMENTS

MATERIALS

605-2.1

DELETE: Paragraphs (a) and (b).

CONSTRUCTION METHODS

605-3.4 INSTALLATION OF SEALANTS

ADD:

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

METHOD OF MEASUREMENT

605-4.1

DELETE: Entire Paragraph and REPLACE with:

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

BASIS OF PAYMENT

605-5.1

DELETE: Entire Paragraph and REPLACE with:

Payment for joint sealing between the new PCC Pavement and new HMA Pavement and new PCC Pavement jointing shall be included in the costs for Item 501.

ITEM 610 – CONCRETE FOR MISCELLANEOUS STRUCTURES

DESCRIPTION

610-1.1

ADD:

This item shall consist of furnishing and installing structural concrete for the purpose of installing new lights, signs, duct banks, and other miscellaneous items that require the use of structural Portland Cement Concrete as shown on the plans.

METHOD OF MEASUREMENT

610-5.1

REVISE to read:

Concrete for miscellaneous structures shall be considered incidental to the contract unit price for the items requiring concrete and no separate measurement or payment will be made. The prices shall be full compensation for furnishing all materials and or preparation, delivering and installation of these materials, and for all labor, equipment, tools and incidentals necessary to complete the item.

BASIS OF PAYMENT

610-6.1

ADD:

No direct payment shall be made for excavation required for the placement of any structural Portland Cement Concrete, be it excavation for new lights, signs, duct banks, or for any other incidental concrete installation.

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

ITEM 620 – RUNWAY AND TAXIWAY MARKING

DESCRIPTION

620-1.1

ADD:

This item shall also consist of installing temporary pavement marking on existing Taxiway E to be removed. If the Contractor elects to apply temporary pavement markings by painting in locations where other approved methods are acceptable, no additional compensation will be provided.

MATERIALS

620-2.2 MARKING MATERIALS

ADD:

Paint type shall be Waterborne Type I or II.

620-2.3 PAINT

DELETE:

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

CONSTRUCTION METHODS

620-3.5 APPLICATION

REVISE the first paragraph to read:

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

METHOD OF MEASUREMENT

620-4.1

REVISE to read:

The quantity of permanent markings to be paid for shall be the number of square feet of painting with the specified material **measured only once to apply two coats** in conformance with the specifications

and accepted by the Resident Engineer. Quantities will not be distinguished between different colors of paint except for the black border.
Preparation of pavement markings prior to remarking shall not be paid separately but considered incidental to the new pavement marking installation.

BASIS OF PAYMENT

620-5.1

ADD:

Payment will be made under:

ITEM AR620520 PAVEMENT MARKING – WATERBORNE – PER SQUARE FOOT.
ITEM AR620525 PAVEMENT MARKING – BLACK BORDER – PER SQUARE FOOT.
ITEM AR620900 PAVEMENT MARKING REMOVAL – PER SQUARE FOOT.

ITEM 800308 – EXPLORATORY EXCAVATION

DESCRIPTION

800308-1.1

This item shall consist of constructing an exploratory trench for the purpose of locating and avoiding damage to existing FAA cables within the construction limits of the proposed utility crossings, or as directed by the Engineer. The Contractor shall notify the FAA five (5) working days prior to performing this work so that FAA can locate the cable.

EQUIPMENT AND MATERIALS

800308-2.1

The locating exploratory excavation shall be hand dug.

CONSTRUCTION METHODS

800308-3.1

The location of the trench shall be as determined by the Contractor and shall be 24” in width and not less than 52” in depth measured from the existing ground elevation so as to allow for proper investigation of the trench. Each side of the locating trench shall be excavated to a distance of ten feet to establish the line and grade of the existing utility. Any damage to the existing utilities shall be repaired immediately at the Contractor’s expense.

800308-3.2

After the trench has been inspected by the Engineer and the FAA, the trench shall be backfilled. The first layer of backfill in the trench shall encompass existing cables; be 3 inches deep, loose measurement; and shall be either earth or sand containing no mineral aggregate particles that would be retained on a 1/4-inch sieve. This layer shall not be compacted. The second layer shall be 5 inches deep, loose measurement, and shall contain no particles that would be retained on a one inch sieve. The remaining third and subsequent layers of backfill shall not exceed 8 inches of loose measurement and be excavated or imported material and shall not contain stone or aggregate larger than 4 inches maximum diameter. The compaction shall conform to Section 701 of the Standard Specifications and/or these Special Provisions.

If the excavated material meets the above criteria, they can be used to backfill the trench. The Contractor shall repair all disturbed areas by the construction of the locating trench to its original condition. The restoration shall include any necessary topsoiling, seeding, fertilizing and mulching. All restoration shall conform to the Standard Specifications and/or these Special Provisions.

METHOD OF MEASUREMENT

800308-4.1

The locating trench will be measured for payment per each of actual trench constructed and accepted. The exposure distance of ten feet on either sides of the existing utility will not be measured for payment.

BASIS OF PAYMENT

800308-5.1

The locating trench shall be paid for at the contract unit price per each of trench constructed at the depth specified, which shall be full compensation for all materials, equipment, labor, tools and any

necessary incidentals required to complete this item of work. The landscaping including grading and topsoiling required to restore the areas of trenching shall not be paid for separately but shall be considered incidental to this item.

Payment will be made under:

ITEM AR800308 EXPLORATORY EXCAVATION – PER EACH.

PART 11 – DRAINAGE

ITEM 701 – PIPE FOR STORM DRAINS AND CULVERTS

DESCRIPTION

701-1.1

ADD:

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

MATERIALS

701-2.12 BACKFILL

REPLACE: Gradation of Backfill Table with the following:

Gradation of Backfill

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

ADD:

The quality of aggregate for backfill shall conform to the requirements of Section 154-2.2.

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 AR701512 12" RCP, CLASS IV – PER FOOT.
ITEM AR701518 18" RCP, CLASS IV – PER FOOT.

ITEM 705 – PIPE UNDERDRAINS FOR AIRPORTS

MATERIALS

705-2.1 GENERAL

DELETE: Paragraphs a and c.

705-2.2 PIPE

DELETE: Paragraphs a, c and d.

705-2.5 BACKFILL

DELETE: This entire Section and REPLACE with:

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

Porous backfill material shall conform to the requirements for IDOT CA-16 or CM-16.

CONSTRUCTION METHODS

705-3.2 EXCAVATION

Replace 4th paragraph with the following:

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

705-3.4 LAYING AND INSTALLING PIPE

ADD:

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

705-3.7 BACKFILL

DELETE: Paragraphs b and c.

ADD:

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

ADD: New Section:

705-3.11 UNDERDRAIN REMOVAL

This work shall consist of the removal of existing underdrain pipes of various types and sizes. Trenches resulting from underdrain removal shall be backfilled and compacted in accordance with Section 701-3.5. Pipe shall be disposed of off airport property.

METHOD OF MEASUREMENT

705-4.1

ADD:

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

The underdrain removal to be paid for shall be the number of linear feet of underdrain satisfactorily removed and disposed of off airport property, measured along the centerline of the pipe from removal limits.

BASIS OF PAYMENT

705-5.1

Payment will be made under:

ITEM AR705504 4" PERFORATED UNDERDRAIN – PER FOOT.
ITEM AR705506 6" PERFORATED UNDERDRAIN – PER FOOT.
ITEM AR705544 4" NON PERFORATED UNDERDRAIN – PER FOOT.
ITEM AR705900 REMOVE UNDERDRAIN – PER FOOT.

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

DESCRIPTION

751-1.1

ADD:

These items of work shall also consist of construction of 6' manhole as detailed in the plans and the installation of 4' manhole, Type A inlet, underdrain collection structure, and the removal of collection structure. 4' manhole shall be in conformance with IDOT Standard 602401-07 and Type A inlet shall be in conformance with IDOT Standard 602301-04.

MATERIALS

751-2.12 BACKFILL

REPLACE: Gradation of Backfill Table with the following:

Gradation of Backfill

Sieve Size	Gradation Percent Passing
	CA 6
1 1/2	100
1	95±5
½	75±15
No. 4	43±13
No. 16	25±15
No. 200	8±4

ADD:

The quality of aggregate for backfill shall conform to the requirements of Section 154-2.2.

CONSTRUCTION METHODS

751-3.1 UNCLASSIFIED EXCAVATION

ADD:

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

ADD: New Section:

751-3.12 MANHOLE ADJUSTMENT

ADD:

Adjustment of existing manholes shall be as detailed in the plans. Any required adjustment rings shall be considered incidental to the manhole adjustment. Replacement of existing casting with new

manhole casting shall be supplied by the Contractor and considered incidental to the manhole adjustment.

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

METHOD OF MEASUREMENT

751-4.1

ADD:

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

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

BASIS OF PAYMENT

751-5.1

ADD:

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

Payment will be made under:

ITEM AR705635 UNDERDRAIN COLLECTION STRUCTURE – PER EACH.
ITEM AR705905 REMOVE COLLECTION STRUCTURE – PER EACH.
ITEM AR751411 INLET-TYPE A – PER EACH.
ITEM AR751540 MANHOLE 4’ – PER EACH.
ITEM AR751560 MANHOLE 6’ – PER EACH.
ITEM AR751903 REMOVE MANHOLE – PER EACH.
ITEM AR751943 ADJUST MANHOLE – PER EACH.

ITEM 800004 – RESTRICTOR PLATE

DESCRIPTION

800004-1.1

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

Work includes removal of the existing restrictor plate and installation of a restrictor plate in existing drainage structure as shown on Site Plan and Project Control Plan.

MATERIALS

800004-2.1

New restrictor plate shall be galvanized and installed on the upstream size of the structure. The plate shall have a hole with size as specified on the plans.

New stainless steel anchors shall be 1" diameter of sufficient length to provide embedment into existing drainage structure wall. New restrictor plate shall be tack welded to anchors.

CONSTRUCTION METHODS

800004-3.1

The Contractor shall install the new restrictor plate such the invert of orifice in the new plate matches the existing invert, at the invert elevation indicated on the plans.

METHOD OF MEASUREMENT

800164-4.1

Removal of existing restrictor plate shall not be measured separately for payment but shall be considered incidental to the new restrictor plate.

Connections to existing structure shall not be measured separately for payment but shall be considered incidental to the new restrictor plate.

Acceptance of the pay item occurs after installation of the restrictor plate as specified on the plans.

BASIS OF PAYMENT

800164-5.1

This price shall be full compensation for furnishing all materials and for all preparation and placing of the materials; removal of existing restrictor plate, installation of restrictor plate, furnishing and installation of such specials and connections to other structures to complete the item as shown on the plans; and for all labor equipment, tools and incidentals necessary to complete the item.

Payment will be made under:

ITEM AR800004 RESTRICTOR PLATE – PER EACH.

ITEM 800164 – VOLUME CONTROL INSTALLATION

DESCRIPTION

800164-1.1

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

The 4" perforated underdrain and 4" non perforated underdrain shall be paid separately as stated in Section 705.

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

MATERIALS

800164-2.1

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

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

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

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

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

CONSTRUCTION METHODS

800164-3.1 EXCAVATION

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

800164-3.2 BASE COURSE AND FINE AGGREGATE

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

METHOD OF MEASUREMENT

800164-4.1

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

All excess material shall be stockpiled at the locations noted on the plans or as directed by the Engineer at no additional cost to the contract.

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

BASIS OF PAYMENT

800164-5.1

The 4” perforated underdrain and 4” non perforated underdrain shall be paid separately as stated in Section 705.

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

Payment will be made under:

ITEM AR800164 VOLUME CONTROL INSTALLATION – PER LUMP SUM.

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 lighting, cabling, signage, access roads, haul roads, staging area, storage area) shall be considered incidental to the contract.

MATERIALS

901-2.2 LIME

DELETE: Entire Section.

901-2.3 FERTILIZER

ADD:

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

CONSTRUCTION METHODS

901-3.2 DRY APPLICATION METHOD

DELETE: Paragraph (c.) Seeding

ADD:

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

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

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

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

901-3.3 WET APPLICATION METHOD

DELETE: Entire Section.

METHOD OF MEASUREMENT

901-4.1

ADD:

All areas disturbed by electrical work and material staging/storage areas and haul routes, will not be measured for payment but shall be considered incidental to the contract as part of restoration at the Contractor's cost.

BASIS OF PAYMENT

901-5.1

ADD:

Payment will be made under:

ITEM AR901510 SEEDING – PER ACRE.

ITEM 905 – TOPSOIL

DESCRIPTION

905-1.1

ADD:

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

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

METHOD OF MEASURMENT

905-4.1

DELETE: This entire section.

ADD:

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

905-4.2

DELETE: This entire section.

BASIS OF PAYMENT

905-5.1

DELETE: This entire section.

ADD:

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

ITEM 908 – MULCHING

908-1.1

ADD:

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

MATERIALS

908-2.1 MULCH MATERIAL

REVISE: First sentence to read:

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

METHOD OF MEASUREMENT

908-4.1

DELETE: First paragraph and REPLACE with:

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

All areas disturbed by electrical work and material staging/storage areas and haul routes, will not be measured for payment but shall be considered incidental to the contract as part of restoration at the Contractor's cost.

BASIS OF PAYMENT

908-5.1

ADD:

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 PVC duct 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.

This item of work shall also consist of the removal of cables and disposed of off Airport property.

EQUIPMENT AND MATERIALS

108-2.2 CABLE

ADD:

Airfield Lighting cable and temporary cable under this item shall be:

- L-824, 1 - 1/C #8, 5,000 V, Type C, in conduit

108-2.4 CABLE CONNECTIONS

DELETE: The first and second sentence of paragraph **d. The taped or heat-shrink 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: New Section:

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. The 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 BANKS OR CONDUITS

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 INSTALLATION OF DIRECT-BURIED CABLE IN TRENCHES

a. Trenching.

REVISE: 18" to 30" in the last sentence of the first paragraph.

108-3.5 SPLICING

DELETE: The first and second paragraph of Section **d. Taped or heat-shrink 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. Contractor shall provide shop drawing for splicing method and cast splicing kit. Contractor shall also leave a minimum of 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” 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 70-16 herein.

METHOD OF MEASUREMENT

108-4.1

REVISE: This Section to read:

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.

108-4.2

REVISE: This Section to read:

The length of 1/C #8 5KV UG CABLE installed in conduits or ducts to be paid for, shall be the number of lineal feet measured in place, complete and ready for operation, and accepted as satisfactory, and no extra quantity will be allotted for any vertical distances or the required cable slack, as stated under Item 108-3.3, in the Standard Specifications.

The length of cable in conduits or ducts to be paid for, shall be the number of lineal feet measured in place and no extra quantity will be allotted for any vertical distances or the cable slack removal. The length of conduit removal shall be considered incidental to the cable removal and shall not be measured separately.

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.

The cost of removing airfield lighting cable and fiber optic cable from existing conduit as called out in the plans to make way for new cables shall be measured as REMOVE CABLE.

The cost of temporary cables and jumpers as required for construction phasing and to keep circuits operational during construction shall not be measured separately for payment but shall be considered incidental to the unit bid price for the cable.

The footage of line marking tape installed shall be considered incidental to the work and shall not be measured separately.

BASIS OF PAYMENT

108-5.1

REVISE: This Section to read:

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,

temporary cables and jumpers, and for all labor, equipment, tools and incidentals necessary to complete these items.

Payment will be made at the contract unit price per linear foot cable removal and shall be full compensation for removal, disposal, backfill and restoration. All PVC conduit, steel conduit, and unit duct conduit removal are considered incidental and shall not be paid for separately.

Payment will be made under:

ITEM AR108108 1/C #8 5KV UG CABLE – PER FOOT.
ITEM AR108960 REMOVE CABLE – 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 concrete encased duct, new PVC duct direct buried, duct bank removals, including installation of appropriate duct markers in pavement at the locations shown in the plans or as directed by the Engineer.

EQUIPMENT AND MATERIALS

110-2.3 PLASTIC CONDUIT

ADD:

The conduit used for direct buried shall be Schedule 80 PVC of the size indicated in the plans.

ADD: The following new sections.

110-2.11 DUCT MARKER

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

Brass duct markers shall only be used at bituminous pavement locations as shown on the plans. At concrete pavement locations, the Contractor shall stamp the concrete as directed by the Resident Engineer.

110-2.12 AGGREGATE BACKFILL

Crushed aggregate material conforming to the requirements of Item 701 or as approved by the Resident Engineer shall be used for backfill at the pavement crossings for proposed duct installation. In lieu of aggregate, the Contractor may substitute controlled low strength material (CLSM) in accordance with Item 153 titled CONTROLLED LOW STRENGH MATERIAL.

110-2.13 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. The 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

110-3.5 BACKFILLING FOR CONDUITS

ADD: To the end of the second paragraph:

If granular material is used for trench backfill, it shall be compacted to not less than 95% of AASHTO T 180 for areas designated for aircraft with gross weights greater than 60,000 pounds.

ADD: New Section:

110-3.8 REMOVALS

The existing duct and conduits called out for removal shall be completely removed and disposed of off Airport property by the Contractor. Where the removals fall within limits of existing, proposed or future pavements, the void shall be backfilled with granular backfill material and compacted according to Section 701-3.5. At locations outside of pavement areas the void shall be backfilled and compacted according to Section 152. Backfilling shall be incidental to the removal.

BASIS OF PAYMENT

110-5.1

DELETE: Entire Section.

ADD:

Payment will be made at the contract unit price per linear foot for each size of direct buried PVC conduit, 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.

Payment will be made at the contract unit price per linear foot for each 4-way concrete encased duct, 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.

Payment will be made at the contract unit price per linear foot for concrete encased duct removal and shall be full compensation for removal, disposal, backfill and restoration. All other PVC conduit, steel conduit, and unit duct conduit removal are considered incidental and shall not be paid for separately.

Connecting new conduit to existing manholes, handholes, splice cans, and light and sign bases shall not be paid for separately but shall be considered incidental to the associated duct or conduit.
The installation of duct markers shall not be paid for but shall be considered incidental to the contract.

Topsoiling and seeding of the duct and conduit trench shall not be paid for separately but shall be considered incidental to the associated duct.

PVC Duct required for temporary cabling shall not be paid for but shall be incidental to the contract.

Payment will be made under:

ITEM AR110202 2” PVC DUCT, DIRECT BURY – PER FOOT.
ITEM AR110504 4-WAY CONCRETE ENCASED DUCT – PER FOOT.
ITEM AR110900 REMOVE DUCT – PER FOOT.

ITEM 115 – ELECTRICAL MANHOLES AND JUNCTION STRUCTURES

EQUIPMENT AND MATERIALS

ADD: The following new sections.

115-2.18

The Contractor shall install handholes at locations specified and as detailed in the plans. Electrical handholes shall comply with requirements as detailed in the plans and of Item 751 of the specifications. Electrical handholes shall meet the requirements of IDOT Highway Standard 814001-03, Portland Cement Concrete.

115-2.19 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. The 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.

METHOD OF MEASUREMENT

115-4.1

ADD:

The quantity of electrical handholes to be paid for shall be the number of each installed in place, including grounding and duct connections, completed and accepted by the Resident Engineer.

BASIS OF PAYMENT

115-5.1

ADD:

Payment will be made under:

ITEM AR110610 ELECTRICAL HANDHOLE – PER EACH.
ITEM AR110906 REMOVE ELECTRICAL HANDHOLE – PER EACH.
ITEM AR110907 REMOVE ELECTRICAL MANHOLE – PER EACH.

ITEM 125 – INSTALLATION OF AIRPORT LIGHTING SYSTEMS

DESCRIPTION

125-1.1

ADD:

Airfield lighting improvements shall include:

- Removal of taxiway lights, in pavement runway lights, runway guard lights, and guidance signs
- Installation of new LED taxi guidance signs
- Installation of new runway guard lights
- Installation of new High Intensity in pavement runway lights
- New base mounted Medium Intensity LED taxiway lights along new Taxiway K4
- New base mounted Medium Intensity taxiway lights along existing Taxiway K

EQUIPMENT AND MATERIALS

125-2.9 RUNWAY AND TAXIWAY GUIDANCE SIGNS

ADD:

Taxi holding position signs and taxi guidance signs shall conform to the type, class, style, nomenclature and dimensions shown in the plans to match the existing guidance signs and as specified herein.

Airfield taxiway signs shall be LED L-858, Size 2, Style 2/3, Class 2 conforming to the nomenclature indicated in the plans and shall be capable of operating on 3-step and 5-step regulators. 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.

The LED L-858 Airfield Guidance Signs shall conform to the requirements of FAA Advisory Circular 150/5345-44 (latest revision) “Specification for Runway and Taxiway Signs” and FAA “Engineering Brief No. 67” (current edition).

ADD: New Section:

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. The 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

ADD: The following new sections.

125-3.5 REMOVAL OF EXISTING SIGNS

The existing sign foundation and base can shall be removed and disposed of off Airport property and the voids backfilled with topsoil to existing groundline, graded, seeded and mulched. The existing taxi guidance signs shall be carefully removed from the sign base, cleaned and turned over to the Airport,

including, but not limited to, the sign, mounting hardware, splice can cover, and transformer. Damage to the existing sign during removal shall be repaired by the Contractor at no additional cost, to the satisfaction of the Engineer and Airport. Any sign components that the Airport does not want shall be disposed of off airport property at no additional cost to the contract.

125-3.6 REMOVAL OF EXISTING LIGHTS

Existing lights noted on the plans to be removed entirely shall include the complete removal of the fixture, cans, foundation and associated cables. Light fixtures and transformers shall be turned over to the airport. Any light components that the Airport does not want shall be disposed of off airport property at no additional cost to the contract.

METHOD OF MEASUREMENT

DELETE: Entire section.

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

a. The number of base mounted taxiway lights, runway guard lights, in-pavement runway lights, guidance signs and elevated retroreflective markers removed per the plan drawings and details, and accepted by the Engineer. This item shall include removal and disposal off Airport property of the existing concrete foundations, stakes, cans, light fixtures and associated items.

b. The number of base mounted taxiway lights, runway guard lights, in-pavement runway lights, guidance signs installed in place as complete units, ready for operation and accepted by the Engineer. This item shall include installation of new base cans, foundations, new grounding, new isolation transformers, new L-823 connectors and installation of new base mounted light fixtures and signs.

c. The number of splice cans with new cover, installed in place as complete units, ready for operation and accepted by the Engineer. This item shall include installation of the base can, cover, new grounding, splices, and miscellaneous connections as specified herein.

BASIS OF PAYMENT

125-5.1

ADD:

These prices shall be full compensation for furnishing all materials and for all preparation, removals, modifications, assembly, and installation of these materials, coordination with the manufacturers and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

ITEM AR125415 MITL-BASE MOUNTED – PER EACH.
ITEM AR125416 MITL-BASE MOUNTED-LED – PER EACH.
ITEM AR125443 TAXI GUIDANCE SIGN, 3 CHARACTER – PER EACH.
ITEM AR125444 TAXI GUIDANCE SIGN, 4 CHARACTER – PER EACH.
ITEM AR125445 TAXI GUIDANCE SIGN, 5 CHARACTER – PER EACH.
ITEM AR125447 TAXI GUIDANCE SIGN, 7 CHARACTER – PER EACH.
ITEM AR125525 HIRL, INPAVEMENT – PER EACH.
ITEM AR125902 REMOVE BASE MOUNTED LIGHT – PER EACH.
ITEM AR125903 REMOVE INPAVEMENT LIGHT – PER EACH.

ITEM AR125904 REMOVE TAXI GUIDANCE SIGN – PER EACH.
ITEM AR125911 REMOVE RUNWAY GUARD LIGHT – PER EACH.
ITEM AR800816 L-804 RGL ELEVATED, BASE MOUNTED – PER EACH.

IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA

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

POLICY MEMORANDUM

January 1, 2007	Springfield	07-21

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

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

DEFINITIONS

Department - Illinois Department of Transportation.

Bureau - Bureau of Materials and Physical Research, at 126 East Ash Street, Springfield, Illinois 62704-4766.

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

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

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

Source - The name and location of the manufacturing process from which the finely divided mineral is obtained.

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

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

Cement - Portland cement.

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

Microsilica - An amorphous silica of high silica content and purity possessing high pozzolanic activity.

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

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

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

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

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

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

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

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

Grab Sample - A sample secured from a conveyor, from bulk storage, or from a bulk shipment in one operation.

Composite Sample - Combined grab samples taken at prescribed intervals over a period of time.

NIST - National Institute of Standards and Technology.

CCRL - Cement and Concrete Reference Laboratory.

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

1.0 PURPOSE

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

2.0 SCOPE

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

3.0 SPECIFICATION REQUIREMENTS, SAMPLING, AND TEST PROCEDURES

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

4.0 APPROVED SOURCE PROCEDURE

4.1 A **Manufacturer** or **Supplier** requesting **Source** approval of a **Finely Divided Mineral** shall provide the following to the **Bureau**:

(1) The **Manufacturer**'s or **Supplier**'s name and location.

(2) The **Source** name, location (station), and number of generating units.

(3) The name of the **Finely Divided Mineral** and its class or grade.

(4) A certification that the **Finely Divided Mineral** meets the applicable requirements of Section 3.0.

(5) A 6-month testing history.

(6) A copy of the **Manufacturer**'s or **Supplier**'s quality control program.

(7) A copy of the last **CCRL** inspection report of the testing laboratory used by the **Manufacturer** or **Supplier** of **the Finely Divided Mineral,** with documentation of resolution of any discrepancies noted therein. The **Manufacturer** or **Supplier** of **HRM** or **Microsilica** shall provide a copy of the testing laboratory's **CCRL** inspection report and/or an **ISO 9000 Series** certificate.

(8) A copy of the Material Safety Data Sheet (MSDS) for the **Finely Divided Mineral**.

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

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

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

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

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

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

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

4.3 Reporting Requirements for **Approved Sources**:

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

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

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

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

4.4 Record Requirements for **Approved Sources:**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4.7 Revocation of **Approved Source** Status:

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

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

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

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

5.0 UNAPPROVED SOURCE PROCEDURE

5.1 A **Manufacturer** or **Supplier** requesting approval of a **Finely Divided Mineral** from an **Unapproved Source** shall provide the following to the **Bureau**:

(1) The **Manufacturer's** or **Supplier's** name and location.

(2) The **Source** name, location (station), and number of generating units.

(3) The name of the **Finely Divided Mineral** and its class or grade.

(4) A current test report, in English, which indicates the standard physical and chemical composition of the **Finely Divided Mineral** as per Section 3.0.

(5) The transportation method and location at which an inspector from the **Bureau** will be able to obtain **Acceptance (ACC) Samples**.

(6) If requested by the **Bureau**, the **Manufacturer** or **Supplier** shall deliver to the **Bureau** a 24-hr **Composite Preliminary (PRE) Sample** of the **Finely Divided Mineral** from current shipments. The **Manufacturer** or **Supplier** shall assume the cost to deliver it to the **Bureau.** The size of the **PRE Sample** shall not be less than 3 kg (6 lb) and the sample shall be properly identified as required in Attachment 1.

5.2 Sampling and Test Requirements for **Unapproved Sources** in North America:

(1) **Finely Divided Minerals** from an **Unapproved Source** will be sampled, tested, and approved by the **Bureau** before use on **Department** projects. The **Bureau** has the option to affix a seal to secure **Finely Divided Minerals** in storage (e.g. silo, truck, railroad car, or barge) until the **Bureau's** testing is completed.

(2) Upon arrival of the **Finely Divided Mineral** to Illinois, an inspector from the **Bureau** will obtain **Acceptance (ACC) Grab Samples** according to the applicable specifications. The **Bureau** will determine the number of representative samples required.

(3) The **Manufacturer** or **Supplier** may request the **Bureau** to sample the **Finely Divided Mineral** prior to arrival in Illinois. In the event the request is approved, the **Manufacturer** or **Supplier** shall be responsible for payment of transportation, per diem (meals), lodging, and incidental travel costs incurred by the **Department** inspector. If the **Department** determines that it lacks the resources to accomplish out-of-state inspection, the **Finely Divided Mineral** may be sampled and tested according to the procedures in Section 5.3.

(4) **Acceptance (ACC) Samples** will be tested by the **Bureau** for conformance to Section 3.0, and to approve the **Finely Divided Mineral** for use on **Department** projects.

(5) **Random Investigation (INV) Samples** of **Finely Divided Minerals** may be obtained at final destination by a representative of the **Department**. The representative will either take or witness the taking of the **INV Samples**. **INV Samples** will be **Grab Samples** and will be taken according to the applicable specification. The sampling location and frequency for obtaining **INV Samples** will be determined by the **Bureau** in consultation with the district offices. The **Bureau** will use **INV Samples** to verify that the **Finely Divided Mineral** shipped meets the requirements of Section 3.0.

5.3 Sampling and Test Requirements for **Unapproved Sources** Located Outside North America:

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

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

The importer's laboratory shall test its portion of each barge **Grab Sample** for the standard physical requirements of the applicable specifications. One random barge **Grab Sample**, representing the **Finely Divided Mineral** in each hold of the vessel shall be tested for chemical composition.

Upon completion of the tests, the importer shall deliver to the **Bureau** a certification that states the **Finely Divided Mineral** in the vessel unloaded at the port of entry has been tested by the importer, and complies with the applicable specifications. Attached to the certification shall be a test report of all barge samples. The report shall include the name of the vessel, the source of the **Finely Divided Mineral**, the barge number, the hold number, the date the sample was taken, the quantity of **Finely Divided Mineral** in the barge, and the physical and chemical test results obtained on the samples.

The importer shall immediately notify the **Bureau** if a barge sample fails to meet the applicable specification requirements.

The **Bureau** will review the certification and compare the importer's test data to the test data obtained by the **Bureau** on its portion of each split sample.

When the certification and the accompanying test report are examined and determined to be correct, the **Bureau** will notify the importer and the district offices that the **Finely Divided Mineral** is approved for state projects.

Random Investigation (INV) Samples, from one or more barges, may be taken by a **Department** inspector when the barges arrive at the Illinois terminal(s).

The **Department** will reject any foreign **Finely Divided Mineral** tested by the **Bureau**, or the importer, that does not meet the specification requirements. The **Department** may reject any barge of **Finely Divided Mineral** wherein the differences in test values, obtained by the **Department** and the importer on the split sample, exceeds the multilaboratory precision of the test method, but the **Finely Divided Mineral** is within specifications.

Alternative proposals to the sampling and test requirements stated in this section will be considered for **Finely Divided Minerals** which have an acceptable quality history, and which have previously been approved by the **Department**. Requests shall be directed to the **Bureau of Materials and Physical Research** for approval.

6.0 ACCEPTANCE OF FINELY DIVIDED MINERALS

6.1 **Finely Divided Minerals** will be accepted according to the **Department's** current "Standard Specifications for Road and Bridge Construction," current special provisions, and this policy memorandum.

6.2 The **Bureau** will maintain and circulate a current list of **Approved Sources** of **Finely Divided Minerals** which meet the requirements of this policy memorandum. This list will include the name, location, and Producer/Supplier Number of each approved **Manufacturer** or **Supplier** of **Finely Divided Minerals.** These **Manufacturers** or **Suppliers** may ship **Finely Divided Minerals** for immediate use on **Department** projects.

6.3 **Finely Divided Minerals** from **Unapproved Sources** will be approved by the **Bureau** before use on **Department** projects.

7.0 REJECTION OF FINELY DIVIDED MINERALS

7.1 A **Finely Divided Mineral** that fails to conform to the requirements of Section 3.0 of this policy memorandum shall be rejected for use on **Department** projects.

7.2 The **Bureau** will notify the **Manufacturer** or **Supplier** when a **Finely Divided Mineral** is rejected for use on **Department** projects.

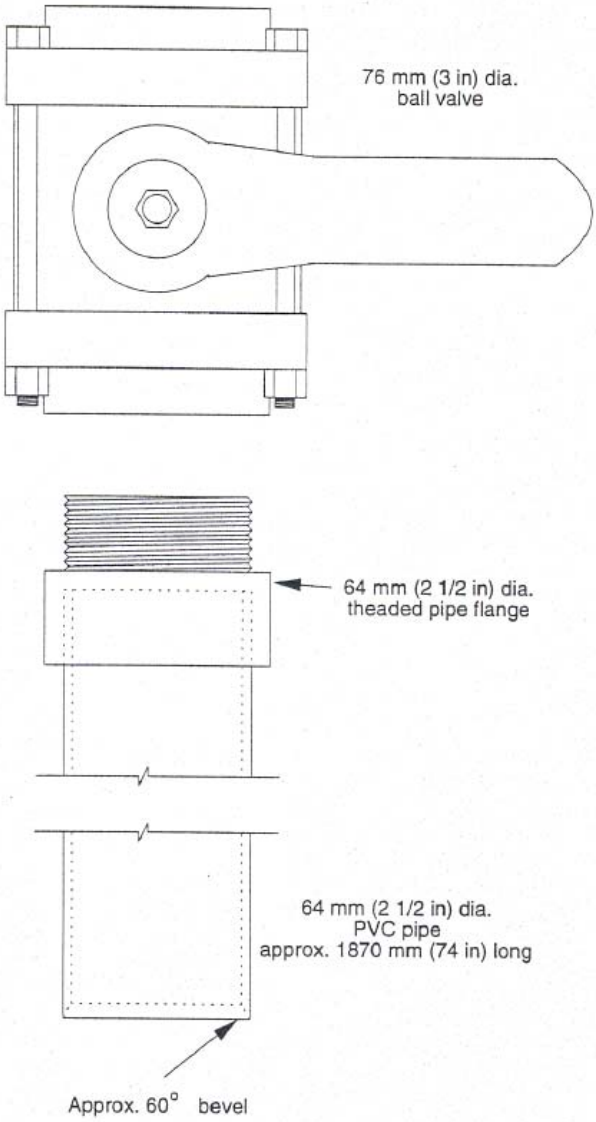
David L. Lippert, P.E.
Acting Engineer of Materials
and Physical Research

Attachment

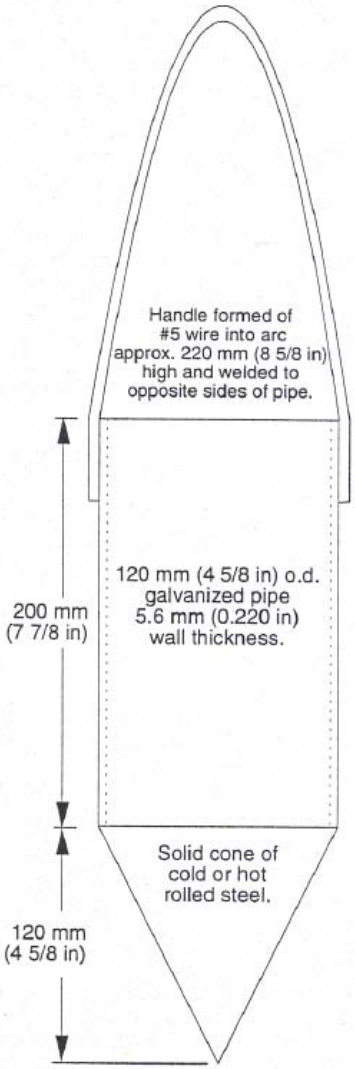
This policy memorandum supersedes Policy Memorandum 06-03 dated January 1, 2006.	

DAD/dt

Vacuum Type Bulk Cement Sampler

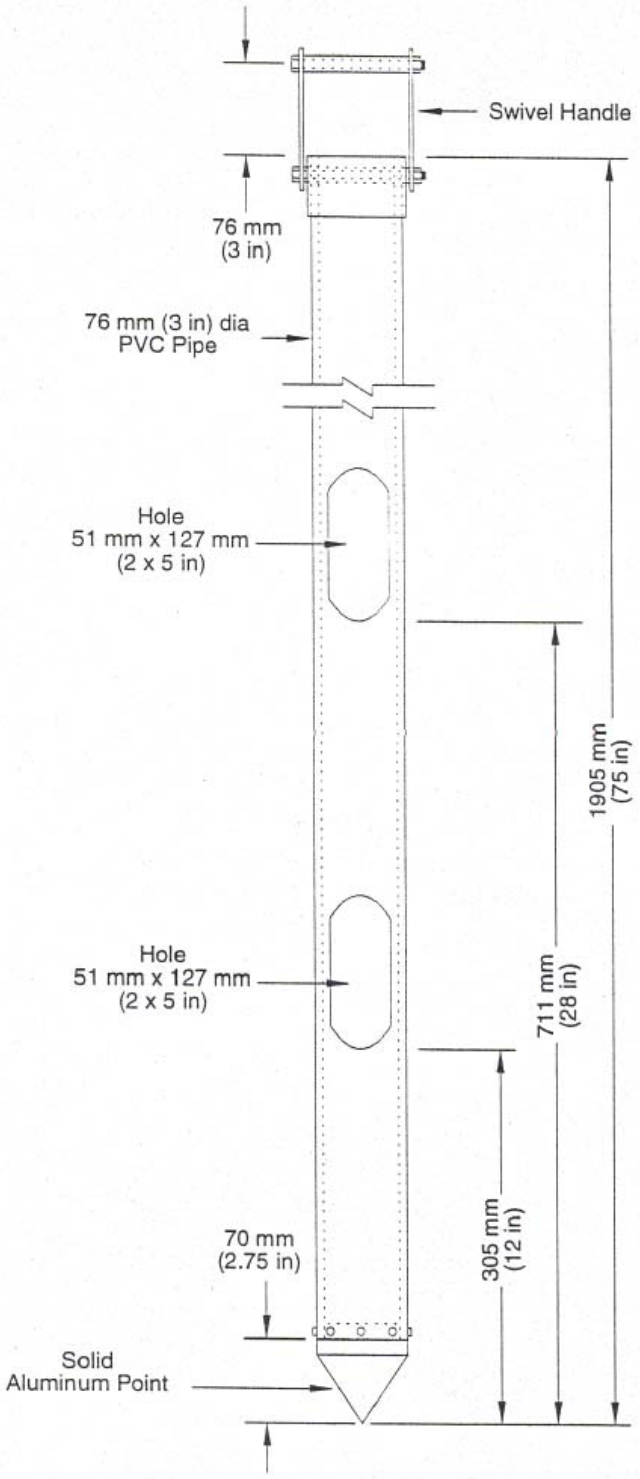


Drop Type Bulk Cement Sampler



Note:
Total mass weight of sampler not less than 6 kg (13 lb)

Tube Type Bulk Cement Sampler



State of Illinois Department of Transportation
Office of Intermodal Project Implementation
Aeronautics

POLICY MEMORANDUM

February 10, 2022	Springfield, Illinois	Number 22-1

TO: CONSULTING ENGINEERS / CONTRACTORS

SUBJECT: ACCEPTED CEMENT TYPES

I. This policy memorandum addresses the accepted cement types for use in Items 501 and 610 Concrete mixtures. Type IL cement has been added to the approved list and may be used on all IDOT-Let Aeronautics projects.

II. The following cement types are approved.

a. Type I cement conforming to the requirements of ASTM C 150.

b. Type IL cement conforming to the requirements of ASTM C 595.

c. All other types are not allowed unless specified by Special Provisions.

William C. Eves, P.E.
Acting Chief Engineer

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

February 20, 2014	Springfield	Number: 87-2

TO: CONSULTING ENGINEERS

SUBJECT: DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS

I. Introduction

This Policy Memorandum deals with the implementation of the bituminous density quality assurance specifications as outlined in the Standard Specifications for Construction of Airports, Sections 401-4.15 and 403-4.15.

II. Sampling

After completion of compaction and when the pavement has reached ambient temperature, the paved area shall be divided into Sublots of 500 tons per type of mix. One core sample (2 cores per sample) shall be taken from each Sublot. The longitudinal and transverse location for each sample shall be determined by use of a random number "Deck" provided by the Division. No core shall be taken closer than two (2) feet from the edge of the mat. A core extraction device shall be used to obtain all cores from the mat. All cores are to be taken by the contractor under the supervision and remain in the possession of the Engineer. It is imperative that the Engineer and the contractor realize that the cores are "money" and that improper coring, extraction, shipping and/or testing can be costly.

One mix sample per 1000 tons of mix laid shall be taken for Extraction, Maximum Specific Gravity (G_{mm}) and Air Void tests. The mix samples shall be sampled by the contractor and split in half.

The Resident Engineer shall randomly designate and send the split samples to an independent laboratory for testing. The laboratory will be verified to be ASTM- certified for all the required testing and be contracted through the Consultant. The frequency of testing split samples shall be 1 per 5000 tons. Higher frequencies may be necessary if the contractor’s tests, and/or mix quality control are inconsistent.

III. Testing

All cores shall be tested for Bulk Specific Gravity (G_{mb}) in accordance with ASTM D2726 using Procedure 10.1, "For Specimens That Contain Moisture." The Theoretical Maximum Gravity (G_{mm}) shall be determined according to ASTM D2041. From these tests the in-place air voids of the compacted pavement are calculated according to ASTM

D3203 for "dense bituminous paving mixtures." Selection of the proper G_{mm} shall be based on a running average of four (4) tests per Lot.

E.g. Lot 1 - Use the average of the two (2) tests for Lot 1.
Lot 2 - Use the average of the four (4) tests from Lots 1 and 2.
Lot 3 - Use the average of the four (4) tests from Lots 2 and 3.

NOTE: When more than four (4) Sublots are used, still use a running average of four (4) tests per Lot.

IV. Acceptance Calculations

The first step in calculating the quantities for pay is to calculate the Mean ($\overline{X}$) 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	X	$(X - \overline{X})$	$(X - \overline{X})^2$
1	4.35	-0.978	0.956
2	3.96	-1.368	1.871
3	6.75	1.422	2.022
4	6.25	0.922	0.850
Sum =	21.31		5.699

N = 4

Mean $(\overline{X})$ = 21.34 / 4 = 5.328

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

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

3. Test for Outliers

Check for Critical "T" Values

$$T = \left|\frac{(X_1 - \overline{X})}{S}\right|^* = \left|\frac{3.96 - 5.328}{1.378}\right| = 0.99$$

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

If the T value exceeds the critical "T" Value in the table below and no 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:

% Adjustment = 0.5 PWL + 55.0
% Adjustment = 0.5 (89.4) + 55.0
% Adjustment = 99.7

Adjusted Quantities = % Adjustment x Lot Quantities
Adjusted Quantities = 0.997 x 2000 tons
Adjusted Quantities = 1994 tons

5. Resampling and Retesting

The contractor has the right to request the resampling and retesting of a complete Lot. This privilege is only allowed once for each Lot and must be requested in writing by the contractor within 48 hours of receiving the official report from the Engineer.

6. Reporting

After completion of the tests for each Lot, the Engineer shall complete the necessary calculations for final adjustment in quantities on the Form AER-1 and have both the Engineer and the Contractor sign the report for copying to both the FAA and IDOA.

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

Supersedes Policy Memorandum 87-2, dated April 1, 2010

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020 Springfield Number: **87-3**

TO: CONSULTING ENGINEERS & CONTRACTORS

SUBJECT: MIX DESIGN, TEST BATCH, QUALITY CONTROL, AND ACCEPTANCE TESTING OF PCC PAVEMENT MIXTURE

I. SCOPE

This Policy Memorandum addresses the Mix Design, Test Batch, Quality Control and Acceptance Testing of PCC pavement mixtures specified by Item 501, Portland Cement Concrete Pavement, in accordance with the Standard Specifications for Construction of Airports, Special Provisions, and policies of the Division of Aeronautics.

II. MIX DESIGN

Prior to the start of paving operations and after approval by the Division of Aeronautics (IDA) of all materials to be used in the manufacture of the concrete, the contractor shall provide a preliminary mix design(s) for evaluation at the Test Batch. The mix design shall indicate saturated surface dry batch weights per cubic yard for each material component. In addition, each material component, including chemical admixtures, shall be identified by the IDOT material code number, the IDOT producer code number, and the producer name and location. Saturated surface dry and oven dry specific gravities, as well as absorption values, for each proposed aggregate to be used in the mix shall be indicated on the mix design.

The Mix Design and the contractor's approved Job Mix Formula (JMF) will be issued by our office subject to verification of the mix by strength tests obtained from mix prepared from a Test Batch(es) according to the approved JMF. The water-cementitious ratio established from the approved test batch is the maximum water-cementitious ratio allowed during production paving.

III. TEST BATCH

At least 28 days prior to the start of production, the contractor and/or producer shall prepare a Test Batch under the direction of the Engineer. The Test Batch shall be prepared at the concrete plant proposed for use in the production of the concrete mix for

the project and shall be in accordance with the approved Job Mix Formula (JMF). When approved by the Engineer, the Test Batch may be prepared at a different plant provided that the same materials specified in the JMF are used. The plant shall have been surveyed and approved by the Engineer prior to preparation of the Test Batch. As required by these Special Provisions, the contractor shall provide Quality Control for production of the concrete. The contractor shall have his Quality Control Manager and a representative of the contractor familiar with the paving operation, present at the Test Batch preparation. The Test Batch shall be prepared as follows:

A. Proportioning

Prior to preparation of the mix, the Proportioning Technician shall perform a minimum of two (2) gradation analysis and two (2) moisture tests on each aggregate used. The gradation analysis shall be reported on form AER-12. From this data, the JMF shall be adjusted for moisture, in accordance with form AER-12. A microwave type moisture probe (or equal) may be allowed to adjust proportions for sand moisture when approved by the Engineer.

B. Preparation of the Mix:

1.) Prepare a Test Batch that is at least one-half (1/2) the manufacturer's rated capacity of the mixing drum (in cubic yards). The Test Batch shall be prepared with the approved JMF, adjusted for moisture.

2.) Mixing requirements shall be:

a.) Central Mix Plant: Mixing time shall be a minimum of 90 seconds. If transit mixer trucks are used to transport the mix, the mix shall be agitated, after mixing, at 2-5 RPM for the approximate time anticipated between batching at the plant and deposit of the concrete in the forms. If non-mixing trucks are used to transport the mix, the mix shall remain in the central mixer with no mixing or agitation for the approximate time anticipated from when the water contacts the cement and deposit of the concrete in the forms.

b.) Transit Mix Plant: Allowed for projects ≤5000 CY. Mixing shall consist of 70-100 Revolutions @ 5-16 RPM. After initial mixing, agitate mix at 2-5 RPM for the approximate time anticipated between batching at the plant and deposit of the concrete in the forms.

3.) Slump and Air: If the air content after aging is 6.0% ±1.5% and provides the required workability for paving, the contractor will make cylinders and/or beams for testing at 3, 7, 14 and 28 days. If the slump is below that required for placement, the contractor may add additional water to increase the slump as necessary up to the maximum water/cement ratio (or water/cementitous material) ratio listed herein. Additional mixing of at least 40 Revolutions will be required with each addition of water. Cylinders and/or beams will be made for testing at 3, 7, 14 and 28 days when the slump is obtained, at 6.0% ±1.5% air content. The water/cement ratio (or water/cementitious material) ratio shall be according to the Standard Specifications, Section 501-4.1, b, (3).

4.) The Proportioning Technician shall complete Form AER-15, PCC Testing Summary and Form AER-6, Concrete Moisture Determination (Adjusted Oven Dry Method), to be given to the Resident Engineer after completion of the Test Batch. The Flask Method, Dunagan Method, and Pycnometer Jar Method (Form AER 19) are also acceptable test methods for the determination of aggregate moisture.

5.) The Resident Engineer and contractor shall each independently complete Form AER-4, Concrete Plant Production, Mix Verification.

6.) The concrete test cylinders and/or beams shall be tested at 3, 7, 14 and 28 days to establish a growth curve of concrete strength vs. age. The compressive strength shall be at least 400 psi, over the specified strength, at 28 days. Flexural strength concrete shall have at least 100 psi over the specified strength at 28 days.

IV. QUALITY CONTROL

Quality control testing is the responsibility of the contractor and must be performed by qualified testing personnel approved by the Engineer. The proportioning technician shall be PCC Level II certified and must perform his or her duties on a full-time basis whenever concrete is produced for an IDA project.

If a QC or QA test for slump, air content, or mix temperature meets or exceeds the Suspension Limits of the Standard Specifications, section 501-5.4, Control Chart Limits the contractor shall reject the batch. In the case of a failing test, the contractor shall take corrective action according to the Standard Specifications, section 501-5.5. Adjustments are subject to the time limitations of 1 hour from time of batching when the concrete is transported in mixer trucks. Time limitations shall be increased by 30 minutes when the concrete mixture contains a retarding admixture. When concrete has been rejected due to failing test results, the contractor shall continue to run tests for the failed test parameter until at least 3 consecutive passing tests are achieved. This testing is in addition to the normal QC and QA testing.

A. Duties of the Proportioning Technician:

1.) Check and maintain shipment tickets of each material used in the manufacture of the concrete. These tickets are to be given to the Resident Engineer for each day's production of concrete. The aggregates shall indicate the quality on the ticket and a statement that the coarse aggregate is a non “D” cracking (freeze-thaw rated by IDOT) aggregate. In lieu of having these statements on each ticket, the contractor may use Form AER-18, Aggregate Certification of Compliance.

2.) Inspect and maintain proper storage of all aggregates and materials daily.

3.) Perform at least two (2) sieve analysis for each aggregate daily.

4.) Inspect all weighing or measuring devices daily.

5.) Twice daily check the actual weighing or measuring of aggregates, cement, water, and admixtures for conformance to adjusted batch proportions. Record data on Form AER-4, Concrete Plant Production, Mix Verification, and calculate the water/cement (or water/cementitious material) ratio.

6.) See that the volume of the batch does not exceed the allowable capacity of the mixer and that the proper mixing time is used.

7.) Make at least two (2) moisture tests of each aggregate daily and correct batch weights as required.

8.) Adjust the dosage rates of the admixtures as required to meet concrete temperature changes and paving conditions.

9.) Complete AER-15, PCC Testing Summary, and Form AER-4, Concrete Plant Production, Mix Verification for each day's production and deliver same to the Resident Engineer at the end of the day for which the data pertains. Provide to the Resident Engineer load tickets for all aggregates, cement, and admixtures used in the mix.

The Resident Engineer will also be required to complete Form AER-4, Concrete Plant Production, Mix Verification. Forms AER-4, AER-12, and AER-15 shall be submitted to the R.E. on a daily basis.

V. ACCEPTANCE TESTING

Acceptance testing shall be according to the Standard Specifications, section 501-6.1-6.6.

As required by Item 501-6.3 of the Standard Specifications, acceptance and payment of the final pavement is based on the strength of either cylinders or beams taken at random during the time of construction. The pavement shall be divided into Lots of 1200 cubic yards with sublots of 300 cubic yards each. The final sublot of the project shall be separated into an additional sublot if the concrete quantity is greater than or equal to 150.0 cubic yards. Otherwise, this remaining quantity shall be incorporated into the previous sublot.

Lots and sublots shall not be separated by mix design or day of paving if the project is using more than one mix design. The grouping of Lots and sublots is to be done solely by the quantity of cubic yards poured on the project.

One random sample (two cylinders or two beams) shall be obtained from each sublot for testing at 28 days to calculate final payment. At the time a sublot sample is taken, one (1) slump, one (1) air test and one (1) temperature check shall be taken.

The above-mentioned tests including Test Batch results will be reported by the R.E. on the AER 15, PCC Testing Summary, and submitted to IDA when updated.

In addition to the above described sample frequency, three (3), seven (7) and fourteen (14) day tests. The Engineer may require additional tests to maintain Quality Control.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 87-3, dated April 1, 2010

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020 | Springfield | Number: **87-4**

TO: CONSULTING ENGINEERS

SUBJECT: DETERMINATION OF BULK SPECIFIC GRAVITY (d)
OF COMPACTED BITUMINOUS MIXES

A. SCOPE. This method of test covers the determination of the bulk specific gravity and the percent air, of core samples from compacted bituminous mixtures using a 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^{o} F. Water baths should be maintained at this temperature throughout testing. Saturate the cores by submerging in the water for a minimum of 20 minutes.

4. With the balance and water bath properly assembled and zeroed, suspend the sample from the balance and submerge it in the water bath. The core must be placed with the original top and bottom in a <u>vertical</u> position. If necessary, add sufficient water to bring the water level up to the overflow outlet. Permit any excess to overflow. Read and record the Saturated Submerged Weight. Designate this weight as (C).

5. Remove the core from the water bath and blot the excess water from the surface of the core with an absorbent cloth or other suitable material. This must be done quickly to prevent the internal water from escaping.

6. Place the core on the balance and read and record the Saturated Surface-dry Weight in air. Designate this weight as (B).

7. Place the core in a tared pan and dry in an oven. When the core is dry (less than 0.5 gm loss in one hour), record the weight and subtract the pan weight. Designate this weight as (A).

8. The following calculation is used to determine the Bulk Specific Gravity of the core.

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

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:

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

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:

% Air = 100 - % Density

G. WEIGHT PER SQUARE YARD OF COMPACTED MIXTURE. The actual weight per square yard of a compacted mixture can be calculated by using the Bulk Specific Gravity (G_{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:

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

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 87-4, dated February 20, 2014

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

August 22, 2016 | Springfield | Number: **90-1**

TO: CONSULTING ENGINEERS

SUBJECT: Resampling and Retesting of PCC Pavement

I. PURPOSE

This Policy Memorandum outlines the procedure for resampling and retesting of individual Lots of PCC Pavement for the determination of final Price Adjustment as permitted by the Special Provisions for Item 501 Portland Cement Concrete Pavement (Plain and Reinforced).

II. RESAMPLING AND RETESTING

If the contractor should request the resampling and retesting of a LOT, he must notify the Engineer in writing within 24 hours of receiving the written test results and payment results for the LOT in question. The entire LOT must be resampled (no selective resampling of individual sublots will be allowed) and the contractor is not allowed to take additional cores. Once approval to resample has been granted the contractor shall resample within five (5) working days. The Engineer will select random locations from each SUBLOT of the LOT in question and direct the contractor to drill two (2) 4 inch or 6 inch diameter cores from each location. The cores shall be obtained, cured and tested in accordance with ASTM C42, Obtaining and Testing Drilled Cores and Sawed Beams of Concrete. The Engineer will take possession of the cores once they have been cut by the contractor.

III. CALCULATION FOR PRICE ADJUSTMENT

1. When Compressive Test Specification (501-3.6(A) Proportions) is specified. The two (2) specimens from each SUBLOT shall be averaged to constitute one SUBLOT sample. The Percent Within Limits (PWL) for the LOT shall then be calculated in accordance with Item 501-5.3, Price Adjustment, of the Special Provisions using the sampled core compressive strengths and the Compressive Test formula. The final Price Adjustment shall be based on the PWL calculated using the sampled core compressive strengths. The test results of the resampled pavement are final. All costs associated with resampling, including, but not limited to testing, curing, and coring the concrete samples shall be borne by the contractor, regardless as to whether the test results increase or decrease calculated payment quantity of concrete pavement.

2. When Flexural Test Specification (501-3.6(B) Proportions) is specified. The two (2) specimens from each SUBLOT shall be averaged to constitute one SUBLOT sample. The SUBLOT samples shall then be averaged to obtain a LOT average. In order for the contractor to increase concrete payment quantity back to 100%, the LOT average shall be at least 6500 psi, and no individual SUBLOT sample shall be less than 6000 psi. Both the LOT average and SUBLOT sample strength requirements must be met in order for the concrete payment quantity to change back to 100%. If both requirements are not met, then the original concrete payment quantity calculated based on the Percent Within Limits (PWL) as outlined in 501-5.3, Price Adjustment, of the Special Provisions shall still apply. The test results of the resampled pavement are final. All costs associated with resampling, including, but not limited to testing, curing, and coring the concrete samples shall be borne by the contractor, regardless as to whether the test results increase or decrease calculated payment quantity of concrete pavement.

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

Supersedes Policy Memorandum 90-1, dated January 1, 2004

Illinois Department of Transportation
Division of Aeronautics
Materials Section

POLICY MEMORANDUM

January 1, 2004	Springfield	Number 95-1

TO: CONSULTING ENGINEERS

SUBJECT: FIELD TEST PROCEDURES FOR MIXER PERFORMANCE AND CONCRETE UNIFORMITY TESTS

I. SCOPE

These methods describe the procedures for obtaining and testing representative samples of fresh concrete in the field to determine the consistency and mixer efficiency of stationary mixers at different mixing time periods.

The concrete produced during the mixing time investigation and not used in the test program may be incorporated in the project provided it conforms to the Standard Specifications for Construction of Airports.

A maximum of two mixing times shall be considered by the Department.

The contractor shall provide all of the necessary equipment and personnel to perform the tests and the Department will observe the testing.

II. APPARATUS REQUIRED

a. Three (3) air meters conforming to the requirements of ASTM C231 or ASTM C173.

b. Three (3) slump cone kits conforming to ASTM C143.

c. One (1) No. 4 sieve having a minimum screen area of 2 sq. ft. The sieve shall conform to the requirements of AASHTO M92.

d. One (1) platform scale graduated in tenths of a pound having a capacity sufficient to perform tests herein after specified.

e. One (1) hydraulic or mechanical testing machine conforming to the requirements of the specified testing method for the project (ASTM C39 or ASTM C78).

f. Flexural strength specimen forms as required. The forms shall be nominally 6x6x30 inch. Means shall be provided for securing the base plate firmly to the mold. The inside surfaces of the mold shall be smooth and free from holes, indentations, or ridges. The sides, bottom, and ends shall be at right angles and shall be straight and true so that the specimens will not be warped. Maximum variation from the nominal cross-section shall not exceed 1/8 inch. The assembled mold and base plate shall be lightly coated with mineral oil or other approved form release oil before use. Compressive strength specimens shall be 6x12 inch and prepared in accordance with ASTM C31.

g. Sufficient water tanks for curing specimens as required by ASTM C31.

h. Small tools such as shovels, scoops, buckets, etc., and water shall be furnished, as required.

III. MIXER

The mixer for which the mixing time is to be evaluated shall conform to the applicable sections of the Standard Specifications for Construction of Airports.

IV. MIXING TIME REQUIREMENTS

The minimum mixing time to be evaluated shall be specified in the Standard Specifications for Construction of Airports.

V. PROCEDURE

A minimum of ten (10) batches per drum shall be tested and evaluated for each original reduced mixing time request. Check tests shall consist of three (3) batches.

If the request is for a new, twin drum mixer, ten (10) batches shall be tested for the first drum and three (3) for the second drum.

Check tests are required if the mixer is moved, major maintenance performed, or if the source or type of aggregate has changed. A minimum frequency of check tests shall be one (1) per year.

a. Mixing Time

The mixing time and batch size to be evaluated shall be proposed by the contractor. The mixing time shall begin when all solid materials are in the mixing drum. The mixer timer shall register or indicate accurately the mixing time and a tolerance of two (2) seconds will be permitted.

If approved by the Engineer, minor adjustments in admixture dosage and water content will be allowed to account for weather conditions, provided that the maximum w/c ratio is not exceeded.

b. Sampling

At the conclusion of the mixing cycle, the mixer shall be discharged and appropriate samples obtained from the first, middle, and last third portions of the batch. Any appropriate method may be used, provided the samples are representative of the respective portions and not the very ends of the batch.

As an alternative, the mixer may be stopped, and the samples removed by any suitable means at equally spaced points from the front to the back of the drum.

c. Testing.

1. Each third portion of the batch shall be tested simultaneously. The Contractor shall provide sufficient personnel to meet this requirement. The Contractor personnel performing the testing shall be Level I PCC Technicians or Concrete Testers. However, a Level I PCC Technician shall be provided to supervise the Concrete Tester.

2. From each third portion of the batch the mass (weight) of the concrete in one air meter measuring bowl shall be determined.

3. The air content of each third portion of the batch shall be determined according to ASTM C231 or ASTM C173. The air content shall be the arithmetic average of two (2) tests from each third portion of the batch.

4. The slump of each third portion of the batch shall be determined according to ASTM C143. The slump shall be the arithmetic average of two (2) tests from each third portion of the batch.

5. Flexural strength specimen(s) (two (2) breaks required) or two (2) compressive strength specimens shall be prepared from each third portion of the batch according to ASTM C31. Flexural strength specimen(s) (two (2) breaks required) shall be tested according to ASTM C78 at seven (7) days of age. Compressive strength specimens shall be tested according to ASTM C39 at seven (7) days of age.

6. The contents from the weighed air meter measuring bowl shall be washed over a No. 4 sieve. Shake as much water as possible from the material retained on the sieve and then weigh the material. The coarse aggregate content (portion of mass (weight) of sample retained on a No. 4 sieve), expressed as a percent, shall be calculated.

VI. CONCRETE UNIFORMITY REQUIREMENTS

a. Test results from each third portion of the batch shall be compared to one another according to Table 1. Each batch shall be evaluated individually.

b. Mixer performance tests consisting of ten (10) batches: If more than seven (7) tests out of the total or more than three (3) in any one criteria are not in compliance with the uniformity requirements (air content, slump, coarse aggregate content, and strength), a reduced mixing time will not be granted.

c. Mixer performance tests consisting of three (3) batches: If more than three (3) tests out of the total are not in compliance with the uniformity requirements, a full ten (10) batch investigation shall be required.

Table 1. Requirements for Uniformity of Concrete

Test	Requirement (Note 1)
Air Content, percent by volume of concrete	1.0 (Note 2)
Slump, inch	1.0 (Note 3)
Coarse aggregate content, portion by weight of each sample retained on the No. 4 sieve, percent	6.0
Average flexural or compressive strength at 7 days for each sample based on average strength of all comparative test specimens, percent	7.5 (Note 4)

Note 1. Expressed as maximum permissible difference in results of tests of samples taken from three locations in the concrete batch.
Note 2. The average air content sample shall be the arithmetic average of two (2) tests.
Note 3. The average slump sample shall be the arithmetic average of two (2) tests.
Note 4. The average flexural strength of each sample shall be the arithmetic average of two (2) beam breaks. The average compressive strength of each sample shall be the arithmetic average of two (2) cylinder breaks.

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

Supersedes Policy Memorandum 95-1 dated January 1, 1995

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

March 28, 2022	Springfield	Number 96-1A

TO: CONSULTING ENGINEERS

SUBJECT: FOR AERONAUTICS 2020 STANDARD SPECIFICATIONS, ITEM 610, STRUCTURAL PORTLAND CEMENT CONCRETE: JOB MIX FORMULA APPROVAL & PRODUCTION TESTING.

I. This policy memorandum addresses the Job Mix Formula (JMF) approval process and production testing requirements when Item 610 is specified for an airport construction contract.

II. PROCESS

a. The contractor may submit a mix design with recent substantiating test data, or he may submit a mix design generated by the Illinois Division of Highways with recent substantiating test data for approval consideration. The mix design should be submitted to the Resident Engineer. An Item 501 PCC Pavement mix can be used in lieu of a Class SI mix, with the approval of the Division.

b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the *2020 Standard Specifications for Construction of Airports* and/or the contract special provisions.

c. The mix design should also indicate the following information:

1. The name, address, and producer/supplier number for the concrete.
2. The source, producer/supplier number, gradation, quality, and SSD weight for the proposed coarse and fine aggregates.
3. The source, producer/supplier number, type, and weight of the proposed flyash and/or cement.
4. The source, producer/supplier number, dosage rate or dosage of all admixtures.

d. After completion of Items b and c above, the mix with substantiating test data shall be forwarded to the Division of Aeronautics for approval. Once the mix has been approved, the production testing shall be at the rate in Section III as specified herein.

III. PRODUCTION TESTING

a. When directed by the Resident Engineer, the Contractor shall make, cure and store one set of cylinders in accordance with AASHTO T23 for acceptance testing for each day the mix is used. In addition, at least one slump, one mix temperature, and one air test shall be conducted for each day the mix is used.

b. The concrete shall have a maximum slump of four inches (4") and minimum slump of two inches (2") when tested in accordance with AASHTO T119.

c. The air content of the concrete shall be between 5% and 8% by volume when tested in accordance with AAHSTO T152.

d. At no time shall the temperature of the concrete exceed 90 degrees Fahrenheit.

e. Acceptance testing for concrete provided under this item shall have a 14-day compressive strength of not less than 3,500 psi when tested in accordance with AASHTO T22. The testing lab shall be IDOT or AASHTO approved. The Resident Engineer will be responsible for the strength tests on the specimens at no expense to the contractor.

f. If more than 100 cubic yards of the mix is placed in a given day, additional tests at a frequency of 1 per 100 cubic yards shall be taken for strength, slump, mix temperature, and air.

g. The Resident Engineer shall collect actual batch weight tickets for every batch of Item 610 concrete used for the project. The actual batch weight tickets shall be kept with the project records and shall be available upon request of the Department of Transportation.

William C. Eves, P.E.
Acting Chief Engineer

Supersedes Policy Memorandum 96-1 (2020) dated December 3, 2020

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number 96-3

TO: CONSULTING ENGINEERS

SUBJECT: REQUIREMENTS FOR QUALITY ASSURANCE ON PROJECTS WITH BITUMINOUS CONCRETE PAVING

I. SCOPE

The purpose of this policy memorandum is to define to the Consulting Engineer the requirements concerning Quality Assurance on bituminous concrete paving projects. Specifically, this memo applies whenever the Contractor is required to comply with the requirements set forth in Policy Memorandum 2003-1, "*Requirements for Laboratory, Testing, Quality Control, and Paving of Bituminous Concrete Mixtures*".

II. LABORATORY APPROVAL

The Resident Engineer shall review and approve the Contractor's plant laboratory to assure that it meets the requirements set forth in the contract specifications and Policy Memorandum 2003-1. This review and approval shall be completed prior to utilization of the plant for the production of any mix.

III. QUALITY ASSURANCE DURING PRODUCTION PAVING

A. The R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. designated by the Division of Aeronautics. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Sample preparation, sample size and number of samples shall be according to Policy Memorandum, "*HMA Comparison Samples*".

B. At the option of the Engineer, additional independent assurance tests may be performed on split samples taken by the Contractor for Quality Control testing. In addition, the Resident Engineer shall witness the sampling and splitting of these samples at the start of production and as needed throughout mix production. The Engineer may select any or all split samples for assurance testing. These tests may be performed at any time after sampling. The test results will be made available to the Contractor as soon as they become available.

C. The Resident Engineer may witness the sampling and testing being performed by the Contractor. If the Resident Engineer determines that the sampling and Quality Control tests are not being performed according to the applicable test procedures, the Engineer may stop production until corrective action is taken. The Resident Engineer will promptly notify the Contractor, both verbally and in writing, of observed deficiencies. The Resident Engineer will document all witnessed samples and tests. The Resident Engineer may elect to obtain samples for testing, separate from the Contractor's Quality Control process, to verify specification compliance.

1. Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits:

Test Parameter	Acceptable Limits of Precision
% Passing	
1/2 in.	5.0 %
No. 4	5.0 %
No. 8	3.0 %
No. 30	2.0 %
No. 200	2.2 %
Asphalt Content	0.3 %
Maximum Specific Gravity (G_{mm}) of Mixture	0.026
Bulk Specific Gravity (G_{mb}) of Gyratory Brix	0.045

2. In the event a comparison of the required plant test results is outside the above acceptable limits of precision, split or independent samples fail the control limits, an extraction indicates non-specification mix, or a continual trend of difference between Contractor and Engineer test results is identified, the Engineer will immediately investigate. The Engineer may suspend production while the investigation is in progress. The investigation may include testing by the Engineer of any remaining split samples or a comparison of split sample test results on the mix currently being produced. The investigation may also include review and observation of the Contractor's technician performance, testing procedure, and equipment. If a problem is identified with the mix, the Contractor 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 the Standard Specifications for Construction of Airports, section 401-6.1 or according to the acceptance procedure outlined in the Special Provisions.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 96-3, dated February 20, 2014

State of Illinois Department of
Transportation Division of
Aeronautics

POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number 97-2

TO: CONSULTING ENGINEERS

SUBJECT: PAVEMENT MARKING PAINT AND GLASS BEADS ACCEPTANCE

I. SCOPE

The purpose of this policy memorandum is to define the procedure for acceptance of pavement marking paint and glass beads.

II. RESIDENT ENGINEER'S DUTIES

The Resident Engineer shall follow the acceptance procedure outlined as follows:

A. Require the contractor to furnish the name of the paint and glass beads manufacturer, IDOT Test I.D. number and the Batch/Lot number proposed for use prior to beginning work. Notify the I.D.A. Materials Certification Engineer when this information is available.

B. Require the manufacturer's certification before painting begins. Check the certification for compliance to the contract specifications.

1. The certification shall be issued from the manufacturer and shall include the specification and the batch number.

2. The paint containers shall have the manufacturer's name, the specification and the batch number matching the certification.

C. If no batch number is indicated on the certification or containers, sample the paint according to the procedure for the corresponding paint type.

D. If the I.D.A. Engineer of Materials indicates that batch number has not been previously sampled and tested, sample the paint according to the procedure for the corresponding paint type. The Division of Aeronautics will provide paint cans upon request by the Resident Engineer. Samples will only be taken in new epoxy lined cans and lids so that the paint will not be contaminated. It is important to seal the sample container immediately with the paint can lid to prevent the loss of volatile solvents.

Mark the sample cans with the paint color, manufacturer's name, and batch number. The paint samples and manufacturer's certification shall be placed in the mail or delivered within 24 hours after sampling. Address or deliver the samples to the Material's Certification Engineer at:

Illinois Department of Transportation
Division of Aeronautics
One Langhorne Bond Drive
Springfield, Illinois 62707

Sampling Procedures for Each Paint Type:

1. Waterborne or Solvent Base Paints
   a. A sample consists of one-pint cans taken per batch number. Before drawing samples, the contents of the component's container must be thoroughly mixed to make certain that any settled portion is fully dispersed.
   b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

2. Epoxy Paint
   a. Take separate one-pint samples of each paint component prior to marking. Before drawing samples, the contents of each component's container must be thoroughly mixed to make certain that any settled portion is fully dispersed. **Do not combine the two components or sample from the spray nozzle.**
   b. Be sure to indicate to the contractor that acceptance of material is based upon a passing test of the paint material.

III. TESTING

The paint will be tested for acceptance by the IDOT Bureau of Materials and Physical Research for conformance to the contract specifications.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes policy memorandum 97-2 dated June 22, 2018

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number: 2001-1

TO: CONTRACTORS

SUBJECT: REQUIREMENTS FOR COLD WEATHER CONCRETING

I. PURPOSE

A. This policy memorandum outlines the minimum requirements for cold weather concreting. Cold weather is defined as whenever the average ambient air temperature during day or night drops below 40 F.

II. COLD WEATHER CONCRETING PLAN

A. The contractor shall submit a cold weather concreting plan to the Engineer for approval. Cold weather concreting operations are not allowed to proceed until the contractor's cold weather concreting plan has been approved by the Engineer.

B. The contractor's plan shall comply with this memorandum and shall address, as a minimum, the following:

1. Concrete Mix Manufacturing
2. Concrete Mix Temperature Monitoring
3. Base Preparation
4. Concrete Curing and Protection
5. In Place Concrete Temperature Monitoring
6. Strength Test Specimens

III. MINIMUM REQUIREMENTS

A. Concrete Mix Manufacturing

1. The contractor must make the necessary adjustments so that the concrete temperature is maintained from 50 F to 90 F for placement. Acceptable methods include:

a) Heating the mixing water Note: If the mixing water is to be heated to a temperature above 100 F, the contractor must include a mixing sequence plan to indicate the order that each component of the mix is to be charged into the mixer.

b) Heating the aggregates Note: The exact method of heating the aggregates shall be included as part of the cold weather concreting plan. Aggregates must be free of ice and frozen lumps. To avoid the possibility of a quick or flash set of the concrete, when either the water or aggregates are heated to above 100 F, they should be combined in the mixer first before the cement is added.

B. Concrete Mix Temperature

1. The contractor shall monitor the mix temperature at the plant and prior to placement in the forms. Mix that does not meet the temperature requirement of 50 F to 90 F shall be rejected for use on the project.

C. Base Preparation

1. Paving or placing concrete on a frozen base, subbase, or subgrade is prohibited.

2. The base, subbase, or subgrade on which the concrete is to be placed shall be thawed and heated to at least 40 F. The method by which the base subbase or subgrade is to be heated shall be indicated in the contractor's cold weather concreting plan. Insulating blankets or heated enclosures may be required.

D. Concrete Protection and Curing

1. In addition to the curing options available in article 501-4.13 (a) (b), (c), (d), and (e) of the Standard Specifications for Construction of Airports, the contractor shall protect the concrete in such a manner as to maintain a concrete temperature of at least 50 F for 7 days.

2. The method of concrete protection shall be by use of insulating layer or heated enclosure around the concrete. The method of protection shall be indicated in the contractor's cold weather concreting plan. When insulating layers are to be used, the thermal resistance to heat transfer (R Value in $F*hr*ft^2/BTU$) of the insulation material selected, shall be appropriate for the slab thickness being constructed and shall be indicated in the cold weather concreting plan.

3. Appendix A shows a chart and table taken from the American Concrete Institute specification, ACI 306 R Cold Weather Concreting, which may be used by the contractor in selecting the proper insulation (R Value) and insulating material which may be used.

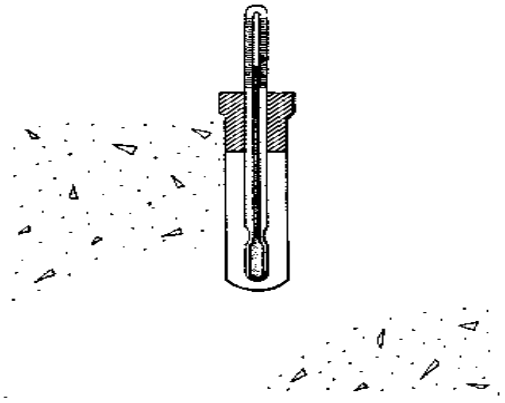
E. In-Place Concrete Temperature Monitoring

1. Once the concrete is in place, the protection method used, must ensure that the concrete temperature does not fall below 50 F for the time period specified in Section (D. 1.) of this Policy Memorandum (7 days).

2. The concrete temperature on the surface and below the surface must be monitored and recorded by the contractor for the duration of the protection period in Section (D. 1.).

3. After the concrete has hardened, surface temperature can be checked with special surface thermometers or with an ordinary thermometer that is kept covered with insulating blankets. The high and low values for each 24-hour period of protection must be measured and recorded.

4. One acceptable method of checking temperature below the concrete surface is given in the Portland Cement Association (PCA) book entitled "Design and Control of Concrete Mixtures" latest edition. The method is indicated below and it should be noted that the thermometer should be capable of recording high and low values for a given 24-hour period.



5. The exact method for surface and sub-surface concrete temperature monitoring shall be indicated in the contractor's cold weather concreting plan. The maximum permissible difference between the interior and surface temperature is 35 F. Adjustments in protection method shall be implemented if the maximum permissible difference is exceeded.

F. Strength specimen handling

1. The Contractor is responsible for making, transporting, and curing all samples (beams or cylinders)
2. The Contractor is required to load the testing machine and dispose of the broken pieces.
3. Onsite, indoor curing facilities, meeting the requirements of ASTM C-31, shall be required for cold weather concreting operations.

4. Sampling for strength specimens shall be according to the Contract Special Provisions. Sampled concrete shall be transported to the indoor curing facilities for the casting of strength specimens.

5. The exact location and description of the curing facilities shall be indicated in the contractor's cold weather concreting plan.

6. The method of transporting concrete sampled from the grade to the curing facilities for casting shall be indicated in the contractor's cold weather concreting plan.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2001-1 dated January 1, 2004

APPENDIX A

Minimum exposure temperatures for concrete flatwork placed on the ground for concrete placed & surface temperature maintained at 50 F (10 C) for 3 days on ground at 35 F (2 C)

Slab thickness, in. (m)	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance **R**, hr-ft^2-F/Btu (m^2-K/W), is used			
	R = 2 (0.35)	**R** = 4 (0.70)	**R** = 6 (1.06)	**R** = 8 (1.41)
Cement content = 300 lb/yd2 (178 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	*	*	*	*
18 (0.46)	42 (6)	38 (3)	32 (0)	26 (-3)
24 (0.61)	37 (3)	25 (-4)	11 (-12)	-3 (-19)
30 (0.76)	31 (-1)	15 (-9)	-1 (-18)	-17 (-27)
36 (0.91)	31 (-1)	12 (-11)	-5 (-21)	-22 (-30)
Cement content = 400 lb/yd2 (237 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	46 (8)	44 (7)	42 (6)	40 (4)
18 (0.46)	36 (2)	22 (-6)	8 (-13)	-6 (-21)
24 (0.61)	28 (-2)	9 (-13)	-10 (-23)	-29 (-34)
30 (0.76)	21 (-6)	0 (-18)	-21 (-29)	-42 (-41)
36 (0.91)	21 (-6)	-4 (-20)	-29 (-34)	-50 (-46)
Cement content = 500 lb/yd2 (296 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	42 (6)	36 (2)	30 (-1)	24 (-4)
18 (0.46)	30 (-1)	12 (-11)	-6 (-21)	-22 (-30)
24 (0.61)	21 (-6)	-5 (-21)	-31 (-35)	-50 (-46)
30 (0.76)	16 (-9)	-10 (-23)	-42 (-41)	-74 (-59)
36 (0.91)	16 (-9)	-18 (-28)	-50 (-46)	#
Cement content = 600 lb/yd2 (356 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	38 (3)	26 (-3)	14 (-10)	2 (-17)
18 (0.46)	24 (-4)	0 (-18)	-24 (-31)	-48 (-44)
24 (0.61)	14 (-10)	-16 (-27)	-46 (-43)	-82 (-63)
30 (0.76)	10 (-12)	-20 (-29)	-62 (-52)	#
36 (0.91)	7 (-14)	-30 (-34)	#	#

* > 50 F (10 C): additional heat required

<< -60 F (-51 C)

Minimum exposure temperatures for concrete flatwork placed on the ground for concrete placed & surface temperature maintained at 50 F (10 C) for 7 days on ground at 35 F (2 C)

Slab thickness, in. (m)	Minimum ambient air temperature, deg F (deg C) allowable when insulation having these values of thermal resistance **R**, hr-ft^2-F/Btu (m^2-K/W), is used			
	R = 2 (0.35)	**R** = 4 (0.70)	**R** = 6 (1.06)	**R** = 8 (1.41)
Cement content = 300 lb/yd2 (178 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	*	*	*	*
18 (0.46)	46 (8)	42 (6)	36 (2)	30 (-1)
24 (0.61)	40 (4)	31 (-1)	22 (-6)	11 (-12)
30 (0.76)	35 (2)	22 (-6)	7 (-14)	-8 (-22)
36 (0.91)	31 (-1)	13 (-11)	-5 (-21)	-23 (-31)
Cement content = 400 lb/yd2 (237 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	*	*	*	*
18 (0.46)	41 (5)	32 (0)	22 (-6)	12 (-11)
24 (0.61)	35 (2)	19 (-7)	-1 (-17)	-15 (-26)
30 (0.76)	28 (-2)	8 (-13)	-14 (-26)	-36 (-38)
36 (0.91)	23 (-5)	-4 (-20)	-29 (-34)	-54 (-48)
Cement content = 500 lb/yd2 (296 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	48 (9)	44 (7)	40 (4)	36 (2)
18 (0.46)	36 (2)	22 (-6)	8 (-13)	-6 (-21)
24 (0.61)	28 (-2)	6 (-14)	-16 (-27)	-38 (-39)
30 (0.76)	22 (-6)	-7 (-22)	-36 (-38)	-64 (-53)
36 (0.91)	16 (-9)	-18 (-28)	-50 (-46)	#
Cement content = 600 lb/yd2 (356 kg/m2)				
4 (0.10)	*	*	*	*
8 (0.20)	*	*	*	*
12 (0.31)	44 (7)	38 (3)	32 (0)	26 (-3)
18 (0.46)	31 (-1)	14 (-10)	-5 (-21)	-24 (-31)
24 (0.61)	22 (-6)	-5 (-21)	-32 (-36)	-61 (-52)
30 (0.76)	14 (-10)	-19 (-28)	-67 (-55)	#
36 (0.91)	7 (-14)	-30 (-34)	#	#

* > 50 F (10 C): additional heat required

< -60 F (-51 C)

Thermal Resistance of Various Insulating Materials

Insulating Material	Thermal resistance "R" for these thicknesses of material*	
	1 in., hr·ft3·F / Btu	10 mm, m3·K / W
Boards and slabs		
Expanded polyurethane (R-11 exp.)	6.25	0.438
Expanded polystyrene extruded (R-11 exp.)	5	0.347
Expanded polystyrene extruded, plain	4	0.277
Glass fiber, organic bonded	4	0.277
Expanded polystyrene, molded beads	3.57	0.247
Mineral fiber with resin binder	3.45	0.239
Mineral fiber board, wet felted	2.94	0.204
Sheathing, regular density	2.63	0.182
Cellular glass	2.63	0.182
Laminated paperboard	2	0.139
Particle board (low density)	1.85	0.128
Plywood	1.25	0.087
Blanket		
Mineral fiber, fibrous form processed from rock, slag, or glass	3.23	0.224
Loose fill		
Wood fiber, soft woods	3.33	0.231
Mineral fiber (rock, slag, or glass)	2.5	0.173
Perlite (expanded)	2.7	0.187
Vermiculite (exfoliated)	2.2	0.152
Sawdust or shavings	2.22	0.154

*Values from ASHRAE Handbook of Fundamentals, 1977, American Society of Heating, Refrigerating, and Air-Conditioning Engineers, New York.

State of Illinois
Department of Transportation
Division of Aeronautics

POLICY MEMORANDUM

December 3, 2020	Springfield, Illinois	Number 2003-1

TO: CONSULTANTS & CONTRACTORS

SUBJECT: REQUIREMENTS FOR LABORATORY, TESTING, QUALITY CONTROL, AND PAVING OF SUPERPAVE HMA CONCRETE MIXTURES FOR AIRPORTS

I. SCOPE

The purpose of this policy memorandum is to define to the Contractor the requirements concerning the laboratory, testing, Quality Control, and paving of HMA mixtures utilizing Superpave technology. References are made to the most recent issue of the Standard Specifications for Construction of Airports (Standard Specifications) and to American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO) and IDOT Bureau of Materials Illinois Lab Procedure (ITP) testing methods. The Quality Assurance and acceptance responsibilities of the Resident Engineer are described in Policy Memorandum 96-3.

II. LABORATORY

The Contractor shall provide a laboratory located, at the plant, according to the current Illinois Department of Transportation, Bureau of Materials Policy Memorandum (PM) 6-08, *Minimum Private Laboratory Requirements for Construction Materials Testing or Mix Design*. The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Hot Mix Asphalt (HMA) Job Mix Formula (JMF), Quality Control (QC) testing and Quality Assurance (QA) testing. The laboratory and equipment furnished by the Contractor shall be properly calibrated and maintained. The Contractor shall maintain a record of calibration results at the laboratory. The Engineer may inspect measuring and testing devices at any time to confirm both calibration and condition. If the Engineer determines that the equipment is not within the limits of dimensions or calibration described in the appropriate test method, he may stop production until corrective action is taken. If laboratory equipment becomes inoperable or insufficient to keep up with mix production testing, the Contractor shall cease mix production until adequate and/or sufficient equipment is provided.

III. MIX DESIGN SUBMITTAL

Based upon data and test results submitted by the Contractor, the Illinois Division of Aeronautics (IDA) Engineer of Construction & Materials shall issue the final Job Mix Formula (JMF) approval letter that concurs or rejects the Contractor's proposed JMF. The Contractor will be required to perform the sampling and laboratory testing and develop a complete mix design, according to the following guidelines: Mix design submittals should be submitted 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. Initial Mix Design Submittal

1. Use the first tab/page of the IDOT, QC/QA Package, Mix Design Software spreadsheet workbook. Provide the Producer name, Producer # and Producer location of each aggregate and asphalt binder (AB). Producers are assigned Producer numbers by IDOT Central Bureau of Materials.

2. Material code for each aggregate.

3. Aggregate Gradations per ASTM C-136 (The Contractor shall obtain representative samples of each aggregate).

4. Material code for each aggregate (i.e. 022CM11, etc.).

5. Material code for the grade of AB.

6. Proposed Aggregate Blend (% for each aggregate) Note: Based on the gradation results, the Contractor shall select the blend percentages that comply with the Standard Specifications, Section 401/403 – 3.3 (Table: Aggregate – Asphalt Pavements)

7. Producer name, Producer #, and specific gravity of the proposed asphalt cement.

8. IDOT approved Performance Grade (PG) Binder shall be used unless otherwise specified by the IDA Engineer of Construction & Materials.

After verification and approval by IDA of the proposed design information from this Section A, Initial Mix Design Submittal, the Contractor shall proceed to Section B, Mixture Design and Testing, and perform mixture tests on 4 gyratory brix sample (4 point mix design) to determine the optimum AB content for the target Air Voids.

<u>Note: If Section A, Initial Mix Design Submittal, is not performed first, and the complete mix design (gyratory testing) is submitted with an unapproved material source or an incorrect aggregate blend, then the gyratory laboratory testing would have to be re-done.</u>

B. Preliminary Mixture Design & Testing

Design Parameters

Gyrations (N_{des}) – per Standard Specifications for Construction of Airports (Standard Specifications), Section 401/403 – 3.3 (JMF), Table (Asphalt Design Criteria)
Asphalt Content – AC% per Standard Specifications, Section 401/403 – 3.3 (JMF), Table (Aggregate – Asphalt Pavements)
Maximum Specific Gravity – G_{mm} (AAHSTO T 209)
Bulk Specific Gravity – G_{mb} (AAHTO T 166)
% air voids – V_a (ASTM D3203) per Standard Specifications, Section 401/403 – 3.3 Table (Asphalt Design Criteria)
VFA % – per Standard Specifications, Section 401/403 – 3.2 (JMF), Table (Asphalt Design Criteria)

C. Preliminary Mix Design Submittal

The Preliminary JMF including all test results shall be submitted to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer with the following data:

a) Aggregate & asphalt cement material codes
b) Aggregate & asphalt cement producer numbers, names, and locations
c) Percentage of each individual aggregate
d) Aggregate blend % for each sieve
e) AC Specific Gravity
f) Bulk Specific Gravity and Absorption for each aggregate
g) Summary of Superpave Design Data: AC % Mix, G_{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
k) Tensile Strength Ratio (TSR)
l) Type and amount of anti-strip agent when used
m) Date the JMF was developed

D. Mix Approval

Once the preliminary JMF is reviewed and approved by IDA, a JMF approval letter will be issued to the consultant and contractor. Production of HMA is not authorized until a JMF letter has been issued.

E. Change in Material Sources

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

IV. MIX PRODUCTION TESTING

The Quality Control (QC) of the manufacture and placement of HMA mixtures is the responsibility of the Contractor and will be according to the Standard Specifications, Section 401/403-5.1 - 5.6. In addition, the Contractor shall develop a Contractor Quality Control Program (CQCP) in accordance with Item 100 in the Standard Specifications. The (CQCP) shall be submitted on the Form AER 27, Hot Mix Asphalt (HMA) Quality Control Plan. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Quality Control includes the recognition of defects and their immediate correction. This may require increased testing, communication of test results to the plant or the job site, modification of operations, suspension of HMA production, rejection of material, or other actions as appropriate. The Resident Engineer shall be immediately notified of any failing tests and subsequent remedial action. Form AER-14 shall be reported to IDA, Construction/Material Section, Attn: Certification and Mixtures Engineer and the Resident Engineer no later than the start of the next workday. The Contractor shall provide a Quality Control (QC) Manager who will have overall responsibility and authority for Quality Control. This individual shall have successfully completed the IDOT Division of Highways HMA Concrete Level II Technician Course "HMA Proportioning and Mixture Evaluation." In addition to the QC Manager, the Contractor shall provide sufficient and qualified personnel to perform the required visual inspections, sampling, testing, and documentation in a timely manner.

V. TEST SECTION (Note: Applies for Method II only (≥ 2,000 tons/pay item))

The purpose of the test section is to determine if the mix is acceptable and can be compacted to a consistent passing density. The test strip construction and acceptance will be according to the Standard Specifications, Section 401/403-3.5.

VI. MATERIAL ACCEPTANCE

Material acceptance and acceptance sampling to determine conformance to the contract specifications will be performed by the Resident Engineer in accordance with the Standard Specifications, Section 401/403-6.1. In addition to the requirements set forth in Section 401/403-6.1 the R.E. shall perform sample tests at a rate of 1/5000 tons randomly selected by the R.E. and shall be sent with an identification sheet (Form AER 24, Sample Identification) to an ASTM certified independent laboratory. If the project is < 5000 tons, 1 sample selected randomly shall be sent.

Alan D. Mlacnik, P.E.
Bureau Chief of Airport Engineering

Supersedes Policy Memorandum 2003-1 dated June 12, 2004

Illinois Department of Transportation

Memorandum

To: Airport Consultants and Contractors

From: William Eves, P.E.

Subject: HMA Comparison Samples

Date: December 7, 2020

In accordance with Policy Memorandum 96-3, the Resident Engineer (R.E.) shall obtain split comparison samples from the contractor for testing by an ASTM-certified, independent testing laboratory. In order to reduce splitting errors, the R.E. shall request that the contractor split the sample down to individual test sample size. The split samples shall be placed in individual paper bags for each test.

The following list shows the number and size of each sample:

3 Superpave Gyratory Brix (Gmb)..... 3 bags: 4800 grams each
Vacuum Pycnometer Test (Gmm)……...2 bags: 1500 grams each
Ignition Oven or Extraction……2 bags: 1500 grams each

Each paper bag shall be identified with the following information:

Airport Name:
Illinois Project Number:
Type of Mix (Base or Surface):
Date Sampled:
Lot-Sublot Number:
Type of test (Brix - Pycnometer - Ignition Oven or Extraction):

For the samples identified as brix the R.E. shall also include the number of gyrations that are required in the construction contract: Illinois Standard Specifications for Construction of Airports (September 25, 2020), Items 401 and 403, Asphalt Design Criteria.

NUMBER OF SAMPLES TO BE SUBMITTED FOR TESTING

One per test section for each type of mix, then one randomly selected sample for each 5000 tons of mix produced under production paving. Projects with less than 5000 tons of mix shall have one split sample tested per mix type for the project in addition to the test section split sample, if a test section is specified. The split samples not selected shall be stored by the contractor for use at the discretion of the Division of Aeronautics.

The R.E. shall place all seven (7) bags in a box along with all samples and ship them to an ASTM-certified, independent lab for testing. The cost of all testing

is to be borne by the Consultant. The lab shall be chosen by the Consultant but shall not be the same one used by the Contractor. All testing results shall be obtained in a timely manner. The R.E. shall also fill out the sample identification sheet, which shall be sent to the laboratory. Copies of the sample identification sheet and all testing results shall be submitted to:

Illinois Department of Transportation, Division of Aeronautics
Attn: Mixtures and Certification Engineer

Supersedes Comparison Samples Memorandum, dated February 20, 2014

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS

SAMPLE IDENTIFICATION

AIRPORT_____ LOCATION_____

ILLINOIS PROJECT NO. _____

MIX PRODUCER _____

PRODUCER NUMBER _____

LOCATION _____

TYPE OF MIX _____

LOT NUMBER _____ SUBLOT NUMBER _____

DATE SAMPLED _____

SAMPLED FROM _____

OF GYRATIONS _____

COMMENTS_____

_____

_____

FILL IN ALL BLANKS

_____
R.E. or REPRESENTATIVE SIGNATURE

EMAIL COPY TO:

DIVISION OF AERONAUTICS
MIXTURES and CERTIFICATIONS ENGINEER

NOTE: Samples should be submitted on day of sampling but no later than 48 hours.

ENVIRONMENTAL REPORT REVISED MARCH 20, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andres Matos
Geo Services, Inc
1235 E Davis Street
Arlington Heights, Illinois 60004

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JOB DESCRIPTION

Glen Ellyn Put Cores & Bores

JOB NUMBER

500-260163-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization

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Authorized for release by
Jim Knapp, Senior Project Manager
Jim.Knapp@et.eurofinsus.com
(630)758-0262

Table of Contents

Job ID: 500-260163-1 — Eurofins Chicago

Job Narrative
500-260163-1

Receipt
The samples were received on 11/14/24 13:45. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.0º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) analyzed in batch 500-795755 was outside the method criteria for the following analyte(s): Chloromethane, Vinyl Chloride, Isopropyl ether, and 1,2,3-Trichlorobenzene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 500-795725 and analytical batch 500-795755 recovered outside control limits for the following analytes: Vinyl Chloride, 1,2,3-Trichlorobenzene and Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-1(0-2') — Lab Sample ID: 500-260163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.019		0.018	0.015	mg/Kg	50	☼	8260D	Total/NA
Ethylbenzene	0.016	J	0.018	0.012	mg/Kg	50	☼	8260D	Total/NA
Xylenes, Total	0.033	J	0.036	0.017	mg/Kg	50	☼	8260D	Total/NA
Benzo[a]anthracene	0.011	J	0.036	0.0077	mg/Kg	1	☼	8270E	Total/NA
Chrysene	0.011	J	0.036	0.0095	mg/Kg	1	☼	8270E	Total/NA
Fluoranthene	0.011	J	0.036	0.0084	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.011	J	0.036	0.0099	mg/Kg	1	☼	8270E	Total/NA
Arsenic	21		1.0	0.35	mg/Kg	1	☼	6010D	Total/NA
Barium	99		1.0	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.11	J	0.20	0.036	mg/Kg	1	☼	6010D	Total/NA
Chromium	16		1.0	0.50	mg/Kg	1	☼	6010D	Total/NA
Lead	29		0.51	0.23	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.064		0.017	0.0070	mg/Kg	1	☼	7471B	Total/NA
pH	6.9	H3	0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: B-1(2-5') — Lab Sample ID: 500-260163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.018	J	0.029	0.014	mg/Kg	50	☼	8260D	Total/NA
Benzo[g,h,i]perylene	0.019	J	0.035	0.0077	mg/Kg	1	☼	8270E	Total/NA
Phenanthrene	0.013	J	0.035	0.0078	mg/Kg	1	☼	8270E	Total/NA
Pyrene	0.014	J	0.035	0.0097	mg/Kg	1	☼	8270E	Total/NA
Arsenic	5.9		0.95	0.33	mg/Kg	1	☼	6010D	Total/NA
Barium	30		0.95	0.11	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.15	J	0.19	0.034	mg/Kg	1	☼	6010D	Total/NA
Chromium	14		0.95	0.47	mg/Kg	1	☼	6010D	Total/NA
Lead	12		0.48	0.22	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.022		0.018	0.0076	mg/Kg	1	☼	7471B	Total/NA
pH	7.3	H3	0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: B-2(0-2') — Lab Sample ID: 500-260163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.014	J	0.016	0.014	mg/Kg	50	☼	8260D	Total/NA
Xylenes, Total	0.020	J	0.033	0.016	mg/Kg	50	☼	8260D	Total/NA
Arsenic	19		1.1	0.37	mg/Kg	1	☼	6010D	Total/NA
Barium	97		1.1	0.12	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.28		0.22	0.039	mg/Kg	1	☼	6010D	Total/NA
Chromium	18		1.1	0.54	mg/Kg	1	☼	6010D	Total/NA
Lead	25		0.54	0.25	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.84	J	1.1	0.64	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.058		0.017	0.0072	mg/Kg	1	☼	7471B	Total/NA
pH	7.2	H3	0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: B-2(2-5') — Lab Sample ID: 500-260163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.018		0.018	0.015	mg/Kg	50	☼	8260D	Total/NA
Benzo[g,h,i]perylene	0.012	J	0.037	0.0080	mg/Kg	1	☼	8270E	Total/NA
Arsenic	4.8		1.1	0.38	mg/Kg	1	☼	6010D	Total/NA
Barium	37		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.14	J	0.22	0.040	mg/Kg	1	☼	6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-2(2-5') (Continued) — Lab Sample ID: 500-260163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	16		1.1	0.54	mg/Kg	1	☼	6010D	Total/NA
Lead	13		0.55	0.25	mg/Kg	1	☼	6010D	Total/NA
Silver	0.14	J	0.55	0.14	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.034		0.017	0.0069	mg/Kg	1	☼	7471B	Total/NA
pH	7.6	H3	0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: B-5(0-2') — Lab Sample ID: 500-260163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	12		1.1	0.38	mg/Kg	1	☼	6010D	Total/NA
Barium	48		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.18	J	0.22	0.040	mg/Kg	1	☼	6010D	Total/NA
Chromium	16		1.1	0.54	mg/Kg	1	☼	6010D	Total/NA
Lead	17		0.55	0.25	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.035		0.017	0.0070	mg/Kg	1	☼	7471B	Total/NA
pH	7.3	H3	0.2	0.2	SU	1		9045D	Total/NA

Client Sample ID: B-5(2-5') — Lab Sample ID: 500-260163-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.1		1.1	0.39	mg/Kg	1	☼	6010D	Total/NA
Barium	47		1.1	0.13	mg/Kg	1	☼	6010D	Total/NA
Cadmium	0.18	J	0.23	0.041	mg/Kg	1	☼	6010D	Total/NA
Chromium	19		1.1	0.56	mg/Kg	1	☼	6010D	Total/NA
Lead	14		0.56	0.26	mg/Kg	1	☼	6010D	Total/NA
Selenium	0.68	J	1.1	0.66	mg/Kg	1	☼	6010D	Total/NA
Mercury	0.024		0.017	0.0072	mg/Kg	1	☼	7471B	Total/NA
pH	7.5	H3	0.2	0.2	SU	1		9045D	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CHI
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CHI
6010D	Metals (ICP)	SW846	EET CHI
7471B	Mercury (CVAA)	SW846	EET CHI
9045D	pH	SW846	EET CHI
Moisture	Percent Moisture	EPA	EET CHI
3050B	Preparation, Metals	SW846	EET CHI
3546	Microwave Extraction	SW846	EET CHI
5035	Closed System Purge and Trap	SW846	EET CHI
7471B	Preparation, Mercury	SW846	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-260163-1	B-1(0-2')	Solid	11/06/24 09:00	11/14/24 13:45
500-260163-2	B-1(2-5')	Solid	11/06/24 09:10	11/14/24 13:45
500-260163-3	B-2(0-2')	Solid	11/06/24 09:40	11/14/24 13:45
500-260163-4	B-2(2-5')	Solid	11/06/24 09:50	11/14/24 13:45
500-260163-5	B-5(0-2')	Solid	11/06/24 11:05	11/14/24 13:45
500-260163-6	B-5(2-5')	Solid	11/06/24 11:15	11/14/24 13:45

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-1(0-2')

Date Collected: 11/06/24 09:00
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-1

Matrix: Solid
Percent Solids: 86.8

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.018		0.018	0.0088	mg/Kg	☼	11/06/24 09:00	11/18/24 13:42	50
Toluene	**0.019**		0.018	0.015	mg/Kg	☼	11/06/24 09:00	11/18/24 13:42	50
Ethylbenzene	**0.016**	**J**	0.018	0.012	mg/Kg	☼	11/06/24 09:00	11/18/24 13:42	50
Xylenes, Total	**0.033**	**J**	0.036	0.017	mg/Kg	☼	11/06/24 09:00	11/18/24 13:42	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*	*11/06/24 09:00*	*11/18/24 13:42*	*50*
Toluene-d8 (Surr)	*103*		*75 - 120*	*11/06/24 09:00*	*11/18/24 13:42*	*50*
4-Bromofluorobenzene (Surr)	*121*		*72 - 124*	*11/06/24 09:00*	*11/18/24 13:42*	*50*
Dibromofluoromethane	*92*		*75 - 120*	*11/06/24 09:00*	*11/18/24 13:42*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0074	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Acenaphthylene	<0.036		0.036	0.0061	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Anthracene	<0.036		0.036	0.0074	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Benzo[a]anthracene	**0.011**	**J**	0.036	0.0077	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Benzo[a]pyrene	<0.036		0.036	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Benzo[b]fluoranthene	<0.036		0.036	0.034	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Benzo[g,h,i]perylene	<0.036		0.036	0.0078	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Benzo[k]fluoranthene	<0.036		0.036	0.014	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Chrysene	**0.011**	**J**	0.036	0.0095	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Dibenz(a,h)anthracene	<0.036		0.036	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Fluoranthene	**0.011**	**J**	0.036	0.0084	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Naphthalene	<0.036		0.036	0.0065	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Phenanthrene	<0.036		0.036	0.0079	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Pyrene	**0.011**	**J**	0.036	0.0099	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1
Fluorene	<0.036		0.036	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*70*		*37 - 147*	*11/18/24 10:30*	*11/19/24 16:40*	*1*
2-Fluorobiphenyl (Surr)	*75*		*43 - 145*	*11/18/24 10:30*	*11/19/24 16:40*	*1*
Terphenyl-d14 (Surr)	*96*		*42 - 157*	*11/18/24 10:30*	*11/19/24 16:40*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**21**		1.0	0.35	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1
Barium	**99**		1.0	0.12	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1
Cadmium	**0.11**	**J**	0.20	0.036	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1
Chromium	**16**		1.0	0.50	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1
Lead	**29**		0.51	0.23	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1
Selenium	<1.0		1.0	0.60	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1
Silver	<0.51		0.51	0.13	mg/Kg	☼	11/26/24 10:29	11/27/24 00:38	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.064**		0.017	0.0070	mg/Kg	☼	12/01/24 17:30	12/03/24 08:29	1

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-1(0-2')
Date Collected: 11/06/24 09:00
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-1
Matrix: Solid
Percent Solids: 86.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	6.9	H3	0.2	0.2	SU			11/15/24 11:49	1

Client Sample ID: B-1(2-5')

Date Collected: 11/06/24 09:10
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-2

Matrix: Solid
Percent Solids: 87.9

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.015		0.015	0.0072	mg/Kg	☼	11/06/24 09:10	11/18/24 14:05	50
Toluene	<0.015		0.015	0.012	mg/Kg	☼	11/06/24 09:10	11/18/24 14:05	50
Ethylbenzene	<0.015		0.015	0.010	mg/Kg	☼	11/06/24 09:10	11/18/24 14:05	50
Xylenes, Total	**0.018**	**J**	0.029	0.014	mg/Kg	☼	11/06/24 09:10	11/18/24 14:05	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*11/06/24 09:10*	*11/18/24 14:05*	*50*
Toluene-d8 (Surr)	*104*		*75 - 120*	*11/06/24 09:10*	*11/18/24 14:05*	*50*
4-Bromofluorobenzene (Surr)	*118*		*72 - 124*	*11/06/24 09:10*	*11/18/24 14:05*	*50*
Dibromofluoromethane	*95*		*75 - 120*	*11/06/24 09:10*	*11/18/24 14:05*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0073	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Acenaphthylene	<0.035		0.035	0.0061	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Anthracene	<0.035		0.035	0.0073	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Benzo[a]anthracene	<0.035		0.035	0.0076	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Benzo[a]pyrene	<0.035		0.035	0.034	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Benzo[b]fluoranthene	<0.035		0.035	0.034	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.035	0.0077	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Benzo[k]fluoranthene	<0.035		0.035	0.014	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Chrysene	<0.035		0.035	0.0094	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Dibenz(a,h)anthracene	<0.035		0.035	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Fluoranthene	<0.035		0.035	0.0083	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Naphthalene	<0.035		0.035	0.0065	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Phenanthrene	**0.013**	**J**	0.035	0.0078	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Pyrene	**0.014**	**J**	0.035	0.0097	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1
Fluorene	<0.035		0.035	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*67*		*37 - 147*	*11/18/24 10:30*	*11/19/24 17:05*	*1*
2-Fluorobiphenyl (Surr)	*72*		*43 - 145*	*11/18/24 10:30*	*11/19/24 17:05*	*1*
Terphenyl-d14 (Surr)	*95*		*42 - 157*	*11/18/24 10:30*	*11/19/24 17:05*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.9**		0.95	0.33	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1
Barium	**30**		0.95	0.11	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1
Cadmium	**0.15**	**J**	0.19	0.034	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1
Chromium	**14**		0.95	0.47	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1
Lead	**12**		0.48	0.22	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1
Selenium	<0.95		0.95	0.56	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1
Silver	<0.48		0.48	0.12	mg/Kg	☼	11/26/24 10:29	11/27/24 00:30	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.018	0.0076	mg/Kg	☼	12/01/24 17:30	12/03/24 08:30	1

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-1(2-5')
Date Collected: 11/06/24 09:10
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-2
Matrix: Solid
Percent Solids: 87.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.3	H3	0.2	0.2	SU			11/15/24 11:51	1

Client Sample ID: B-2(0-2')

Date Collected: 11/06/24 09:40
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-3

Matrix: Solid
Percent Solids: 85.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.016		0.016	0.0081	mg/Kg	☼	11/06/24 09:40	11/18/24 14:28	50
Toluene	**0.014**	**J**	0.016	0.014	mg/Kg	☼	11/06/24 09:40	11/18/24 14:28	50
Ethylbenzene	<0.016		0.016	0.011	mg/Kg	☼	11/06/24 09:40	11/18/24 14:28	50
Xylenes, Total	**0.020**	**J**	0.033	0.016	mg/Kg	☼	11/06/24 09:40	11/18/24 14:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*	*11/06/24 09:40*	*11/18/24 14:28*	*50*
Toluene-d8 (Surr)	*105*		*75 - 120*	*11/06/24 09:40*	*11/18/24 14:28*	*50*
4-Bromofluorobenzene (Surr)	*118*		*72 - 124*	*11/06/24 09:40*	*11/18/24 14:28*	*50*
Dibromofluoromethane	*90*		*75 - 120*	*11/06/24 09:40*	*11/18/24 14:28*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.038		0.038	0.0078	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Acenaphthylene	<0.038		0.038	0.0065	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Anthracene	<0.038		0.038	0.0079	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Benzo[a]anthracene	<0.038		0.038	0.0082	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Benzo[a]pyrene	<0.038		0.038	0.037	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Benzo[b]fluoranthene	<0.038		0.038	0.037	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Benzo[g,h,i]perylene	<0.038		0.038	0.0083	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Benzo[k]fluoranthene	<0.038		0.038	0.015	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Dibenz(a,h)anthracene	<0.038		0.038	0.038	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Fluoranthene	<0.038		0.038	0.0090	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.038	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Naphthalene	<0.038		0.038	0.0070	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Phenanthrene	<0.038		0.038	0.0084	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Pyrene	<0.038		0.038	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1
Fluorene	<0.038		0.038	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*75*		*37 - 147*	*11/18/24 10:30*	*11/19/24 17:30*	*1*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*11/18/24 10:30*	*11/19/24 17:30*	*1*
Terphenyl-d14 (Surr)	*97*		*42 - 157*	*11/18/24 10:30*	*11/19/24 17:30*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**19**		1.1	0.37	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1
Barium	**97**		1.1	0.12	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1
Cadmium	**0.28**		0.22	0.039	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1
Chromium	**18**		1.1	0.54	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1
Lead	**25**		0.54	0.25	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1
Selenium	**0.84**	**J**	1.1	0.64	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1
Silver	<0.54		0.54	0.14	mg/Kg	☼	11/26/24 10:29	11/27/24 00:34	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.058**		0.017	0.0072	mg/Kg	☼	12/01/24 17:30	12/03/24 08:32	1

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-2(0-2')
Date Collected: 11/06/24 09:40
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-3
Matrix: Solid
Percent Solids: 85.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.2	H3	0.2	0.2	SU			11/15/24 11:54	1

Client Sample ID: B-2(2-5')

Date Collected: 11/06/24 09:50
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-4

Matrix: Solid
Percent Solids: 86.9

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.018		0.018	0.0087	mg/Kg	☼	11/06/24 09:50	11/18/24 14:51	50
Toluene	**0.018**		0.018	0.015	mg/Kg	☼	11/06/24 09:50	11/18/24 14:51	50
Ethylbenzene	<0.018		0.018	0.012	mg/Kg	☼	11/06/24 09:50	11/18/24 14:51	50
Xylenes, Total	<0.035		0.035	0.017	mg/Kg	☼	11/06/24 09:50	11/18/24 14:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*11/06/24 09:50*	*11/18/24 14:51*	*50*
Toluene-d8 (Surr)	*104*		*75 - 120*	*11/06/24 09:50*	*11/18/24 14:51*	*50*
4-Bromofluorobenzene (Surr)	*118*		*72 - 124*	*11/06/24 09:50*	*11/18/24 14:51*	*50*
Dibromofluoromethane	*91*		*75 - 120*	*11/06/24 09:50*	*11/18/24 14:51*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0075	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Acenaphthylene	<0.037		0.037	0.0063	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Anthracene	<0.037		0.037	0.0075	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Benzo[a]anthracene	<0.037		0.037	0.0078	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Benzo[a]pyrene	<0.037		0.037	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Benzo[b]fluoranthene	<0.037		0.037	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Benzo[g,h,i]perylene	**0.012**	**J**	0.037	0.0080	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Benzo[k]fluoranthene	<0.037		0.037	0.014	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Chrysene	<0.037		0.037	0.0097	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Dibenz(a,h)anthracene	<0.037		0.037	0.037	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Fluoranthene	<0.037		0.037	0.0086	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Naphthalene	<0.037		0.037	0.0067	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Phenanthrene	<0.037		0.037	0.0080	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Pyrene	<0.037		0.037	0.010	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1
Fluorene	<0.037		0.037	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*78*		*37 - 147*	*11/18/24 10:30*	*11/19/24 17:55*	*1*
2-Fluorobiphenyl (Surr)	*83*		*43 - 145*	*11/18/24 10:30*	*11/19/24 17:55*	*1*
Terphenyl-d14 (Surr)	*99*		*42 - 157*	*11/18/24 10:30*	*11/19/24 17:55*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		1.1	0.38	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1
Barium	**37**		1.1	0.13	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1
Cadmium	**0.14**	**J**	0.22	0.040	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1
Chromium	**16**		1.1	0.54	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1
Lead	**13**		0.55	0.25	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1
Selenium	<1.1		1.1	0.65	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1
Silver	**0.14**	**J**	0.55	0.14	mg/Kg	☼	11/26/24 10:29	11/27/24 00:16	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.034**		0.017	0.0069	mg/Kg	☼	12/01/24 17:30	12/03/24 08:34	1

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-2(2-5')
Date Collected: 11/06/24 09:50
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-4
Matrix: Solid
Percent Solids: 86.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.6	H3	0.2	0.2	SU			11/15/24 11:56	1

Client Sample ID: B-5(0-2')

Date Collected: 11/06/24 11:05
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-5

Matrix: Solid
Percent Solids: 90.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.014		0.014	0.0068	mg/Kg	☼	11/06/24 11:05	11/18/24 15:14	50
Toluene	<0.014		0.014	0.012	mg/Kg	☼	11/06/24 11:05	11/18/24 15:14	50
Ethylbenzene	<0.014		0.014	0.0095	mg/Kg	☼	11/06/24 11:05	11/18/24 15:14	50
Xylenes, Total	<0.028		0.028	0.013	mg/Kg	☼	11/06/24 11:05	11/18/24 15:14	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*11/06/24 11:05*	*11/18/24 15:14*	*50*
Toluene-d8 (Surr)	*103*		*75 - 120*	*11/06/24 11:05*	*11/18/24 15:14*	*50*
4-Bromofluorobenzene (Surr)	*119*		*72 - 124*	*11/06/24 11:05*	*11/18/24 15:14*	*50*
Dibromofluoromethane	*92*		*75 - 120*	*11/06/24 11:05*	*11/18/24 15:14*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0073	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Acenaphthylene	<0.036		0.036	0.0061	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Anthracene	<0.036		0.036	0.0074	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Benzo[a]anthracene	<0.036		0.036	0.0077	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Benzo[a]pyrene	<0.036		0.036	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Benzo[b]fluoranthene	<0.036		0.036	0.034	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Benzo[g,h,i]perylene	<0.036		0.036	0.0078	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Benzo[k]fluoranthene	<0.036		0.036	0.014	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Chrysene	<0.036		0.036	0.0095	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Dibenz(a,h)anthracene	<0.036		0.036	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Fluoranthene	<0.036		0.036	0.0084	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.035	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Naphthalene	<0.036		0.036	0.0065	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Phenanthrene	<0.036		0.036	0.0078	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Pyrene	<0.036		0.036	0.0098	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1
Fluorene	<0.036		0.036	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*62*		*37 - 147*	*11/18/24 10:30*	*11/19/24 18:20*	*1*
2-Fluorobiphenyl (Surr)	*66*		*43 - 145*	*11/18/24 10:30*	*11/19/24 18:20*	*1*
Terphenyl-d14 (Surr)	*88*		*42 - 157*	*11/18/24 10:30*	*11/19/24 18:20*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		1.1	0.38	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1
Barium	**48**		1.1	0.13	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1
Cadmium	**0.18**	**J**	0.22	0.040	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1
Chromium	**16**		1.1	0.54	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1
Lead	**17**		0.55	0.25	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1
Selenium	<1.1		1.1	0.65	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1
Silver	<0.55		0.55	0.14	mg/Kg	☼	11/26/24 10:29	11/27/24 00:12	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.035**		0.017	0.0070	mg/Kg	☼	12/01/24 17:30	12/03/24 08:36	1

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-5(0-2')
Date Collected: 11/06/24 11:05
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-5
Matrix: Solid
Percent Solids: 90.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.3	H3	0.2	0.2	SU			11/15/24 11:58	1

Client Sample ID: B-5(2-5')

Date Collected: 11/06/24 11:15
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-6

Matrix: Solid
Percent Solids: 86.6

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.017		0.017	0.0085	mg/Kg	☼	11/06/24 11:15	11/18/24 15:37	50
Toluene	<0.017		0.017	0.015	mg/Kg	☼	11/06/24 11:15	11/18/24 15:37	50
Ethylbenzene	<0.017		0.017	0.012	mg/Kg	☼	11/06/24 11:15	11/18/24 15:37	50
Xylenes, Total	<0.034		0.034	0.016	mg/Kg	☼	11/06/24 11:15	11/18/24 15:37	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*	*11/06/24 11:15*	*11/18/24 15:37*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*	*11/06/24 11:15*	*11/18/24 15:37*	*50*
4-Bromofluorobenzene (Surr)	*120*		*72 - 124*	*11/06/24 11:15*	*11/18/24 15:37*	*50*
Dibromofluoromethane	*92*		*75 - 120*	*11/06/24 11:15*	*11/18/24 15:37*	*50*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0076	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Acenaphthylene	<0.037		0.037	0.0064	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Anthracene	<0.037		0.037	0.0077	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Benzo[a]anthracene	<0.037		0.037	0.0079	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Benzo[a]pyrene	<0.037		0.037	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Benzo[b]fluoranthene	<0.037		0.037	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Benzo[g,h,i]perylene	<0.037		0.037	0.0081	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Benzo[k]fluoranthene	<0.037		0.037	0.014	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Chrysene	<0.037		0.037	0.0099	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Dibenz(a,h)anthracene	<0.037		0.037	0.037	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Fluoranthene	<0.037		0.037	0.0087	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.036	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Naphthalene	<0.037		0.037	0.0068	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Phenanthrene	<0.037		0.037	0.0081	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Pyrene	<0.037		0.037	0.010	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1
Fluorene	<0.037		0.037	0.011	mg/Kg	☼	11/18/24 10:30	11/19/24 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*71*		*37 - 147*	*11/18/24 10:30*	*11/19/24 18:45*	*1*
2-Fluorobiphenyl (Surr)	*76*		*43 - 145*	*11/18/24 10:30*	*11/19/24 18:45*	*1*
Terphenyl-d14 (Surr)	*99*		*42 - 157*	*11/18/24 10:30*	*11/19/24 18:45*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.1**		1.1	0.39	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1
Barium	**47**		1.1	0.13	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1
Cadmium	**0.18**	**J**	0.23	0.041	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1
Chromium	**19**		1.1	0.56	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1
Lead	**14**		0.56	0.26	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1
Selenium	**0.68**	**J**	1.1	0.66	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1
Silver	<0.56		0.56	0.15	mg/Kg	☼	11/26/24 10:29	11/27/24 00:07	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.017	0.0072	mg/Kg	☼	12/01/24 17:30	12/03/24 08:37	1

Client Sample Results

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-5(2-5')
Date Collected: 11/06/24 11:15
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-6
Matrix: Solid
Percent Solids: 86.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.5	H3	0.2	0.2	SU			11/15/24 12:01	1

Definitions/Glossary

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

GC/MS VOA

Prep Batch: 795725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	5035	
500-260163-2	B-1(2-5')	Total/NA	Solid	5035	
500-260163-3	B-2(0-2')	Total/NA	Solid	5035	
500-260163-4	B-2(2-5')	Total/NA	Solid	5035	
500-260163-5	B-5(0-2')	Total/NA	Solid	5035	
500-260163-6	B-5(2-5')	Total/NA	Solid	5035	

Analysis Batch: 795755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	8260D	795725
500-260163-2	B-1(2-5')	Total/NA	Solid	8260D	795725
500-260163-3	B-2(0-2')	Total/NA	Solid	8260D	795725
500-260163-4	B-2(2-5')	Total/NA	Solid	8260D	795725
500-260163-5	B-5(0-2')	Total/NA	Solid	8260D	795725
500-260163-6	B-5(2-5')	Total/NA	Solid	8260D	795725
MB 500-795755/8	Method Blank	Total/NA	Solid	8260D	
LCS 500-795755/5	Lab Control Sample	Total/NA	Solid	8260D	

GC/MS Semi VOA

Prep Batch: 795833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	3546	
500-260163-2	B-1(2-5')	Total/NA	Solid	3546	
500-260163-3	B-2(0-2')	Total/NA	Solid	3546	
500-260163-4	B-2(2-5')	Total/NA	Solid	3546	
500-260163-5	B-5(0-2')	Total/NA	Solid	3546	
500-260163-6	B-5(2-5')	Total/NA	Solid	3546	
MB 500-795833/1-A	Method Blank	Total/NA	Solid	3546	
LCS 500-795833/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 795992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	8270E	795833
500-260163-2	B-1(2-5')	Total/NA	Solid	8270E	795833
500-260163-3	B-2(0-2')	Total/NA	Solid	8270E	795833
500-260163-4	B-2(2-5')	Total/NA	Solid	8270E	795833
500-260163-5	B-5(0-2')	Total/NA	Solid	8270E	795833
500-260163-6	B-5(2-5')	Total/NA	Solid	8270E	795833
MB 500-795833/1-A	Method Blank	Total/NA	Solid	8270E	795833
LCS 500-795833/2-A	Lab Control Sample	Total/NA	Solid	8270E	795833

Metals

Prep Batch: 797122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	3050B	
500-260163-2	B-1(2-5')	Total/NA	Solid	3050B	
500-260163-3	B-2(0-2')	Total/NA	Solid	3050B	
500-260163-4	B-2(2-5')	Total/NA	Solid	3050B	
500-260163-5	B-5(0-2')	Total/NA	Solid	3050B	
500-260163-6	B-5(2-5')	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 797122 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-797122/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-797122/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 797317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	6010D	797122
500-260163-2	B-1(2-5')	Total/NA	Solid	6010D	797122
500-260163-3	B-2(0-2')	Total/NA	Solid	6010D	797122
500-260163-4	B-2(2-5')	Total/NA	Solid	6010D	797122
500-260163-5	B-5(0-2')	Total/NA	Solid	6010D	797122
500-260163-6	B-5(2-5')	Total/NA	Solid	6010D	797122
MB 500-797122/1-A	Method Blank	Total/NA	Solid	6010D	797122
LCS 500-797122/2-A	Lab Control Sample	Total/NA	Solid	6010D	797122

Prep Batch: 797470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	7471B	
500-260163-2	B-1(2-5')	Total/NA	Solid	7471B	
500-260163-3	B-2(0-2')	Total/NA	Solid	7471B	
500-260163-4	B-2(2-5')	Total/NA	Solid	7471B	
500-260163-5	B-5(0-2')	Total/NA	Solid	7471B	
500-260163-6	B-5(2-5')	Total/NA	Solid	7471B	
MB 500-797470/12-A	Method Blank	Total/NA	Solid	7471B	
LCS 500-797470/13-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 797796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	7471B	797470
500-260163-2	B-1(2-5')	Total/NA	Solid	7471B	797470
500-260163-3	B-2(0-2')	Total/NA	Solid	7471B	797470
500-260163-4	B-2(2-5')	Total/NA	Solid	7471B	797470
500-260163-5	B-5(0-2')	Total/NA	Solid	7471B	797470
500-260163-6	B-5(2-5')	Total/NA	Solid	7471B	797470
MB 500-797470/12-A	Method Blank	Total/NA	Solid	7471B	797470
LCS 500-797470/13-A	Lab Control Sample	Total/NA	Solid	7471B	797470

General Chemistry

Analysis Batch: 795577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	9045D	
500-260163-2	B-1(2-5')	Total/NA	Solid	9045D	
500-260163-3	B-2(0-2')	Total/NA	Solid	9045D	
500-260163-4	B-2(2-5')	Total/NA	Solid	9045D	
500-260163-5	B-5(0-2')	Total/NA	Solid	9045D	
500-260163-6	B-5(2-5')	Total/NA	Solid	9045D	
LCS 500-795577/2	Lab Control Sample	Total/NA	Solid	9045D	
LCSD 500-795577/3	Lab Control Sample Dup	Total/NA	Solid	9045D	

QC Association Summary

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

General Chemistry

Analysis Batch: 796099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-1	B-1(0-2')	Total/NA	Solid	Moisture	
500-260163-2	B-1(2-5')	Total/NA	Solid	Moisture	
500-260163-3	B-2(0-2')	Total/NA	Solid	Moisture	
500-260163-4	B-2(2-5')	Total/NA	Solid	Moisture	

Analysis Batch: 796217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-260163-5	B-5(0-2')	Total/NA	Solid	Moisture	
500-260163-6	B-5(2-5')	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(75-126)	(75-120)	(72-124)	(75-120)
500-260163-1	B-1(0-2')	107	103	121	92
500-260163-2	B-1(2-5')	104	104	118	95
500-260163-3	B-2(0-2')	104	105	118	90
500-260163-4	B-2(2-5')	105	104	118	91
500-260163-5	B-5(0-2')	105	103	119	92
500-260163-6	B-5(2-5')	105	102	120	92
LCS 500-795755/5	Lab Control Sample	102	105	117	91
MB 500-795755/8	Method Blank	104	105	119	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	FBP	TPHL
Lab Sample ID	Client Sample ID	(37-147)	(43-145)	(42-157)
500-260163-1	B-1(0-2')	70	75	96
500-260163-2	B-1(2-5')	67	72	95
500-260163-3	B-2(0-2')	75	77	97
500-260163-4	B-2(2-5')	78	83	99
500-260163-5	B-5(0-2')	62	66	88
500-260163-6	B-5(2-5')	71	76	99
LCS 500-795833/2-A	Lab Control Sample	71	80	97
MB 500-795833/1-A	Method Blank	74	77	97

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 500-795755/8
Matrix: Solid
Analysis Batch: 795755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00025		0.00025	0.00012	mg/Kg			11/18/24 13:19	1
Toluene	<0.00025		0.00025	0.00021	mg/Kg			11/18/24 13:19	1
Ethylbenzene	<0.00025		0.00025	0.00017	mg/Kg			11/18/24 13:19	1
Xylenes, Total	<0.00050		0.00050	0.00024	mg/Kg			11/18/24 13:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*		*11/18/24 13:19*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/18/24 13:19*	*1*
4-Bromofluorobenzene (Surr)	*119*		*72 - 124*		*11/18/24 13:19*	*1*
Dibromofluoromethane	*92*		*75 - 120*		*11/18/24 13:19*	*1*

Lab Sample ID: LCS 500-795755/5
Matrix: Solid
Analysis Batch: 795755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.0474		mg/Kg		95	70 - 120
Toluene	0.0500	0.0478		mg/Kg		96	70 - 125
Ethylbenzene	0.0500	0.0469		mg/Kg		94	70 - 123
Xylenes, Total	0.100	0.0962		mg/Kg		96	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*
Toluene-d8 (Surr)	*105*		*75 - 120*
4-Bromofluorobenzene (Surr)	*117*		*72 - 124*
Dibromofluoromethane	*91*		*75 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-795833/1-A
Matrix: Solid
Analysis Batch: 795992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 795833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0068	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Acenaphthylene	<0.033		0.033	0.0056	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Anthracene	<0.033		0.033	0.0068	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Benzo[a]anthracene	<0.033		0.033	0.0070	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Benzo[a]pyrene	<0.033		0.033	0.032	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Benzo[b]fluoranthene	<0.033		0.033	0.032	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Benzo[g,h,i]perylene	<0.033		0.033	0.0072	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Benzo[k]fluoranthene	<0.033		0.033	0.013	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Chrysene	<0.033		0.033	0.0088	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Dibenz(a,h)anthracene	<0.033		0.033	0.033	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Fluoranthene	<0.033		0.033	0.0077	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.032	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Naphthalene	<0.033		0.033	0.0060	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Phenanthrene	<0.033		0.033	0.0072	mg/Kg		11/18/24 10:30	11/19/24 10:24	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-795833/1-A
Matrix: Solid
Analysis Batch: 795992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 795833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.033		0.033	0.0091	mg/Kg		11/18/24 10:30	11/19/24 10:24	1
Fluorene	<0.033		0.033	0.0098	mg/Kg		11/18/24 10:30	11/19/24 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*74*		*37 - 147*	*11/18/24 10:30*	*11/19/24 10:24*	*1*
2-Fluorobiphenyl (Surr)	*77*		*43 - 145*	*11/18/24 10:30*	*11/19/24 10:24*	*1*
Terphenyl-d14 (Surr)	*97*		*42 - 157*	*11/18/24 10:30*	*11/19/24 10:24*	*1*

Lab Sample ID: LCS 500-795833/2-A
Matrix: Solid
Analysis Batch: 795992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 795833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.33	2.67		mg/Kg		80	63 - 109
Acenaphthylene	3.33	2.88		mg/Kg		86	61 - 115
Anthracene	3.33	2.90		mg/Kg		87	68 - 120
Benzo[a]anthracene	3.33	3.07		mg/Kg		92	70 - 121
Benzo[a]pyrene	3.33	3.35		mg/Kg		101	73 - 132
Benzo[b]fluoranthene	3.33	3.41		mg/Kg		102	68 - 123
Benzo[g,h,i]perylene	3.33	3.22		mg/Kg		97	65 - 126
Benzo[k]fluoranthene	3.33	3.32		mg/Kg		100	64 - 128
Chrysene	3.33	3.07		mg/Kg		92	70 - 123
Dibenz(a,h)anthracene	3.33	2.80		mg/Kg		84	66 - 125
Fluoranthene	3.33	2.99		mg/Kg		90	66 - 123
Indeno[1,2,3-cd]pyrene	3.33	2.98		mg/Kg		90	66 - 131
Naphthalene	3.33	2.47		mg/Kg		74	54 - 98
Phenanthrene	3.33	2.89		mg/Kg		87	65 - 115
Pyrene	3.33	3.26		mg/Kg		98	71 - 128
Fluorene	3.33	2.78		mg/Kg		83	62 - 113

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*71*		*37 - 147*
2-Fluorobiphenyl (Surr)	*80*		*43 - 145*
Terphenyl-d14 (Surr)	*97*		*42 - 157*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 500-797122/1-A
Matrix: Solid
Analysis Batch: 797317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 797122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<1.0		1.0	0.34	mg/Kg		11/26/24 10:29	11/26/24 22:44	1
Barium	<1.0		1.0	0.11	mg/Kg		11/26/24 10:29	11/26/24 22:44	1
Cadmium	<0.20		0.20	0.036	mg/Kg		11/26/24 10:29	11/26/24 22:44	1
Chromium	<1.0		1.0	0.50	mg/Kg		11/26/24 10:29	11/26/24 22:44	1
Lead	<0.50		0.50	0.23	mg/Kg		11/26/24 10:29	11/26/24 22:44	1
Selenium	<1.0		1.0	0.59	mg/Kg		11/26/24 10:29	11/26/24 22:44	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 500-797122/1-A
Matrix: Solid
Analysis Batch: 797317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 797122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.50		0.50	0.13	mg/Kg		11/26/24 10:29	11/26/24 22:44	1

Lab Sample ID: LCS 500-797122/2-A
Matrix: Solid
Analysis Batch: 797317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 797122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	10.0	9.53		mg/Kg		95	80 - 120
Barium	200	198		mg/Kg		99	80 - 120
Cadmium	5.00	4.70		mg/Kg		94	80 - 120
Chromium	20.0	19.9		mg/Kg		99	80 - 120
Lead	10.0	10.1		mg/Kg		101	80 - 120
Selenium	10.0	9.12		mg/Kg		91	80 - 120
Silver	5.00	4.23		mg/Kg		85	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 500-797470/12-A
Matrix: Solid
Analysis Batch: 797796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 797470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0069	mg/Kg		12/01/24 17:30	12/03/24 07:46	1

Lab Sample ID: LCS 500-797470/13-A
Matrix: Solid
Analysis Batch: 797796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 797470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.167		mg/Kg		100	80 - 120

Lab Chronicle

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-1(0-2')
Date Collected: 11/06/24 09:00
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9045D		1	795577	MF	EET CHI	11/15/24 11:49
Total/NA	Analysis	Moisture		1	796099	ER	EET CHI	11/19/24 14:38

Client Sample ID: B-1(0-2')
Date Collected: 11/06/24 09:00
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-1
Matrix: Solid
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			795725	WRE	EET CHI	11/06/24 09:00
Total/NA	Analysis	8260D		50	795755	W1T	EET CHI	11/18/24 13:42
Total/NA	Prep	3546			795833	EK	EET CHI	11/18/24 10:30
Total/NA	Analysis	8270E		1	795992	H7CM	EET CHI	11/19/24 16:40
Total/NA	Prep	3050B			797122	BDE	EET CHI	11/26/24 10:29 - 11/26/24 16:29 [1]
Total/NA	Analysis	6010D		1	797317	SJ	EET CHI	11/27/24 00:38
Total/NA	Prep	7471B			797470	S1Z	EET CHI	12/01/24 17:30
Total/NA	Analysis	7471B		1	797796	MJG	EET CHI	12/03/24 08:29

Client Sample ID: B-1(2-5')
Date Collected: 11/06/24 09:10
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9045D		1	795577	MF	EET CHI	11/15/24 11:51
Total/NA	Analysis	Moisture		1	796099	ER	EET CHI	11/19/24 14:38

Client Sample ID: B-1(2-5')
Date Collected: 11/06/24 09:10
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-2
Matrix: Solid
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			795725	WRE	EET CHI	11/06/24 09:10
Total/NA	Analysis	8260D		50	795755	W1T	EET CHI	11/18/24 14:05
Total/NA	Prep	3546			795833	EK	EET CHI	11/18/24 10:30
Total/NA	Analysis	8270E		1	795992	H7CM	EET CHI	11/19/24 17:05
Total/NA	Prep	3050B			797122	BDE	EET CHI	11/26/24 10:29 - 11/26/24 16:29 [1]
Total/NA	Analysis	6010D		1	797317	SJ	EET CHI	11/27/24 00:30
Total/NA	Prep	7471B			797470	S1Z	EET CHI	12/01/24 17:30
Total/NA	Analysis	7471B		1	797796	MJG	EET CHI	12/03/24 08:30

Client Sample ID: B-2(0-2')
Date Collected: 11/06/24 09:40
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9045D		1	795577	MF	EET CHI	11/15/24 11:54

Lab Chronicle

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-2(0-2')
Date Collected: 11/06/24 09:40
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	796099	ER	EET CHI	11/19/24 14:38

Client Sample ID: B-2(0-2')
Date Collected: 11/06/24 09:40
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-3
Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			795725	WRE	EET CHI	11/06/24 09:40
Total/NA	Analysis	8260D		50	795755	W1T	EET CHI	11/18/24 14:28
Total/NA	Prep	3546			795833	EK	EET CHI	11/18/24 10:30
Total/NA	Analysis	8270E		1	795992	H7CM	EET CHI	11/19/24 17:30
Total/NA	Prep	3050B			797122	BDE	EET CHI	11/26/24 10:29 - 11/26/24 16:29 [1]
Total/NA	Analysis	6010D		1	797317	SJ	EET CHI	11/27/24 00:34
Total/NA	Prep	7471B			797470	S1Z	EET CHI	12/01/24 17:30
Total/NA	Analysis	7471B		1	797796	MJG	EET CHI	12/03/24 08:32

Client Sample ID: B-2(2-5')
Date Collected: 11/06/24 09:50
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9045D		1	795577	MF	EET CHI	11/15/24 11:56
Total/NA	Analysis	Moisture		1	796099	ER	EET CHI	11/19/24 14:38

Client Sample ID: B-2(2-5')
Date Collected: 11/06/24 09:50
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-4
Matrix: Solid
Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			795725	WRE	EET CHI	11/06/24 09:50
Total/NA	Analysis	8260D		50	795755	W1T	EET CHI	11/18/24 14:51
Total/NA	Prep	3546			795833	EK	EET CHI	11/18/24 10:30
Total/NA	Analysis	8270E		1	795992	H7CM	EET CHI	11/19/24 17:55
Total/NA	Prep	3050B			797122	BDE	EET CHI	11/26/24 10:29 - 11/26/24 16:29 [1]
Total/NA	Analysis	6010D		1	797317	SJ	EET CHI	11/27/24 00:16
Total/NA	Prep	7471B			797470	S1Z	EET CHI	12/01/24 17:30
Total/NA	Analysis	7471B		1	797796	MJG	EET CHI	12/03/24 08:34

Client Sample ID: B-5(0-2')
Date Collected: 11/06/24 11:05
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9045D		1	795577	MF	EET CHI	11/15/24 11:58
Total/NA	Analysis	Moisture		1	796217	MF	EET CHI	11/20/24 09:09

Lab Chronicle

Client: Geo Services, Inc
Project/Site: Glen Ellyn Put Cores & Bores

Job ID: 500-260163-1

Client Sample ID: B-5(0-2')
Date Collected: 11/06/24 11:05
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-5
Matrix: Solid
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			795725	WRE	EET CHI	11/06/24 11:05
Total/NA	Analysis	8260D		50	795755	W1T	EET CHI	11/18/24 15:14
Total/NA	Prep	3546			795833	EK	EET CHI	11/18/24 10:30
Total/NA	Analysis	8270E		1	795992	H7CM	EET CHI	11/19/24 18:20
Total/NA	Prep	3050B			797122	BDE	EET CHI	11/26/24 10:29 - 11/26/24 16:29 [1]
Total/NA	Analysis	6010D		1	797317	SJ	EET CHI	11/27/24 00:12
Total/NA	Prep	7471B			797470	S1Z	EET CHI	12/01/24 17:30
Total/NA	Analysis	7471B		1	797796	MJG	EET CHI	12/03/24 08:36

Client Sample ID: B-5(2-5')
Date Collected: 11/06/24 11:15
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9045D		1	795577	MF	EET CHI	11/15/24 12:01
Total/NA	Analysis	Moisture		1	796217	MF	EET CHI	11/20/24 09:09

Client Sample ID: B-5(2-5')
Date Collected: 11/06/24 11:15
Date Received: 11/14/24 13:45

Lab Sample ID: 500-260163-6
Matrix: Solid
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			795725	WRE	EET CHI	11/06/24 11:15
Total/NA	Analysis	8260D		50	795755	W1T	EET CHI	11/18/24 15:37
Total/NA	Prep	3546			795833	EK	EET CHI	11/18/24 10:30
Total/NA	Analysis	8270E		1	795992	H7CM	EET CHI	11/19/24 18:45
Total/NA	Prep	3050B			797122	BDE	EET CHI	11/26/24 10:29 - 11/26/24 16:29 [1]
Total/NA	Analysis	6010D		1	797317	SJ	EET CHI	11/27/24 00:07
Total/NA	Prep	7471B			797470	S1Z	EET CHI	12/01/24 17:30
Total/NA	Analysis	7471B		1	797796	MJG	EET CHI	12/03/24 08:37

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Geo Services, Inc
Job ID: 500-260163-1
Project/Site: Glen Ellyn Put Cores & Bores

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	05-31-25

Eurofins TestAmerica, Northwest Chicago
453 N York Street

Elmhurst, IL 60126-2003
phone 630 758 0262 fax

Chain of Custody Record

eurofins

Regulatory Program: ☐ DW ☐ NPDES ☒ RCRA ☐ Other

TestAmerica Laboratories, Inc d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Samuel Plummer	Site Contact:	Date:	COC No
Your Company Name here Geo Services Inc.	Email: Samuel@geoservicesinc.net	Lab Contact:	Carrier:	____ of ____ COCs
Address 1235 E. Davis St.	Tel/Fax: 847-253-3845			TALS Project #
City/State/Zip Arlington Heights/IL/60005	Analysis Turnaround Time: ☒ CALENDAR DAYS ☐ WORKING DAYS			Sampler
(847) 253-3845 Phone	TAT if different from Below			For Lab Use Only.
(xxx) xxx-xxxx FAX	☒ 2 weeks			Walk-in Client
Project Name Glen Ellyn Put cores & bores	☐ 1 week			Lab Sampling
Site	☐ 2 days			Job / SDG No
PO # [redacted] 24091	☐ 1 day			500-260163

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp G=Grab)	Matrix	# of Cont	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	BTEX	PNAs	RCRA metals	pH	Sample Specific Notes
1	B-1 (0-2')	11-6-24	9[illegible] AM	G					X	X	X	X	
2	B-1 (2-5')	"	9[illegible] AM	G					X	X	X	X	
3	B-2 (0-2')	"	9[illegible] AM	G					X	X	X	X	
4	B-2 (2-5')	"	9[illegible] AM	G					X	X	X	X	
5	B-5 (0-2')	"	1[illegible] PM	G					X	X	X	X	
6	B-5 (2-5')	"	11[illegible] AM	G					X	X	X	X	

500-260163 COC

Elmhurst 503325

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact ☐ Yes ☐ No	Custody Seal No	Cooler Temp (°C) Obs'd 0.6 Corr'd 0.0	Therm ID No
Relinquished by	Company Geo Services	Date/Time 11/13/24 10:10	Received by	Company FEDEX	Date/Time 11/13/24 10:10
Relinquished by	Company FEDEX	Date/Time 11/14/24 10:55	Received by	Company FETA	Date/Time 11/14/24 1100
Relinquished by	Company FETA	Date/Time 11/14/24 1345	Received in Laboratory by	Company FETA	Date/Time 11/14/24	11/15/2024

Login Sample Receipt Checklist

Client: Geo Services, Inc

Job Number: 500-260163-1

Login Number: 260163
List Number: 1
Creator: Kenneally, Daniel

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Arun Tailor
Geo Services, Inc
1235 E Davis Street
Arlington Heights, Illinois 60004

Generated 3/18/2025 4:39:45 PM

JOB DESCRIPTION

24091

JOB NUMBER

500-264455-2

Eurofins Chicago
18410 Crossing Drive
Suite E
Tinley Park IL 60487

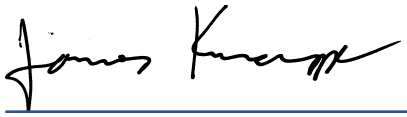
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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Authorized for release by
Jim Knapp, Senior Project Manager
Jim.Knapp@et.eurofinsus.com
(630)758-0262

Table of Contents

Job Narrative
500-264455-2

Receipt
The sample was received on 2/26/2025 8:25 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Client Sample ID: B-6 (0-8"0/S-1

Lab Sample ID: 500-264455-1

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CHI
1311	TCLP Extraction	SW846	EET CHI
3010A	Preparation, Total Metals	SW846	EET CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Sample Summary

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-264455-1	B-6 (0-8"0/S-1	Solid	02/25/25 09:15	02/26/25 08:25

Client Sample Results

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Client Sample ID: B-6 (0-8"0/S-1
Date Collected: 02/25/25 09:15
Date Received: 02/26/25 08:25

Lab Sample ID: 500-264455-1
Matrix: Solid

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		03/14/25 07:31	03/18/25 13:49	1

Definitions/Glossary

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Metals

Leach Batch: 809617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-264455-1	B-6 (0-8"0/S-1	TCLP	Solid	1311	
LB 500-809617/1-B	Method Blank	TCLP	Solid	1311	

Prep Batch: 809879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-264455-1	B-6 (0-8"0/S-1	TCLP	Solid	3010A	809617
LB 500-809617/1-B	Method Blank	TCLP	Solid	3010A	809617
LCS 500-809879/16-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 810339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-264455-1	B-6 (0-8"0/S-1	TCLP	Solid	6010D	809879
LB 500-809617/1-B	Method Blank	TCLP	Solid	6010D	809879
LCS 500-809879/16-A	Lab Control Sample	Total/NA	Solid	6010D	809879

Method: 6010D - Metals (ICP)

Lab Sample ID: LCS 500-809879/16-A
Matrix: Solid
Analysis Batch: 810339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 809879

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium			0.200	0.216		mg/L		108	80 - 120		

Lab Sample ID: LB 500-809617/1-B
Matrix: Solid
Analysis Batch: 810339

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 809879

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		03/14/25 07:31	03/18/25 13:36	1

Lab Chronicle

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Client Sample ID: B-6 (0-8"0/S-1

Date Collected: 02/25/25 09:15
Date Received: 02/26/25 08:25

Lab Sample ID: 500-264455-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
TCLP	Leach	1311			809617	JL	EET CHI	03/12/25 12:29 - 03/13/25 06:29 [1]
TCLP	Prep	3010A			809879	BDE	EET CHI	03/14/25 07:31 - 03/14/25 13:31 [1]
TCLP	Analysis	6010D		1	810339	SJ	EET CHI	03/18/25 13:49

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Accreditation/Certification Summary

Client: Geo Services, Inc
Project/Site: 24091

Job ID: 500-264455-2

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	100201	05-31-25

Login Sample Receipt Checklist

Client: Geo Services, Inc

Job Number: 500-264455-2

Login Number: 264455
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.