

# RETURN WITH BID

LETTING DATE March 11, 2011

ITEM NUMBER 2A

Proposal Submitted By

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State \_\_\_\_\_

9 Digit Zip Code \_\_\_\_\_ Telephone Number \_\_\_\_\_

FEIN Number \_\_\_\_\_ FAX Number \_\_\_\_\_

E-Mail Address \_\_\_\_\_

**BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL**  
(See instructions inside front cover)

## NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.  
(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

# PROPOSAL COVER SHEET



**Illinois Department of Transportation**  
**DIVISION OF AERONAUTICS**

AIRPORT MidAmerica St. Louis

MUNICIPAL DESIGNATION Mascoutah

COUNTY DESIGNATION St. Clair

ILLINOIS PROJECT NO. BLV-4061

FEDERAL PROJECT NO. 3-17-0146-xx

**For engineering information, contact Brian Garkie of Crawford Murphy & Tilly, Inc. at (314) 571-9070.**

**FAA rules prohibit the use of escalation clauses for materials. Therefore, the Division of Aeronautics cannot offer a bituminous material cost adjustment provision for projects utilizing federal funds.**

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included.

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## INSTRUCTIONS

**ABOUT IDOT PROPOSALS:** All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction. In addition, this proposal contains new statutory requirements applicable to the use of subcontractors and, in particular, includes the State Required Ethical Standards Governing Subcontractors to be signed and incorporated into all subcontracts.

**WHO CAN BID?:** Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).

**WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?:** When a prospective prime bidder submits a "**Authorization to Bid or Not for Bid**" form, he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Authorization to Bid or Not for Bid Report**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Authorization to Bid or Not for Bid Report** will indicate the reason for denial. If a contractor has requested to bid but has not received a **Authorization to Bid or Not for Bid Report**, they should contact the Central Bureau of Construction in advance of the letting date.

**WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?:** Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

**ABOUT SUBMITTING BIDS:** It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

### WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	(217)782-3413
Preparation and submittal of bids	(217)782-7806



TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of \_\_\_\_\_  
 \_\_\_\_\_

for the improvement officially known as:

(a) MidAmerica St. Louis Airport

(b) The proposed improvement shown in detail on the plans issued by the Department schedule and detail sheets included herein, includes, in general, the following described work:

**Mike Apron Expansion**

2. The plans for the proposed work are those issued by the Department of Transportation to cover the work described above.

The specifications are those prepared by the Department of Transportation, Division of Aeronautics and designated as “Standard Specifications for Construction of Airports,” the “Supplemental Specifications and Recurring Special Provisions,” the “Interim Revisions to Supplemental Specifications and Recurring Special Provisions”, latest editions located on the IDOT website at <http://www.dot.il.gov/aero/airspecs.html>, and the “Special Provisions” thereto, adopted and in effect on the date of invitation for bids.

3. **COMPLETION TIME/LIQUIDATED DAMAGES.** 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 130 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 below, 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. The following Schedule of Deductions supersedes the table given in Section 60-09 of the Division’s Standard Specifications for Construction of Airports.

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	\$ 375	\$ 500
100,000	500,000	625	875
500,000	1,000,000	1,025	1,425
1,000,000	3,000,000	1,125	1,550
3,000,000	5,000,000	1,425	1,950
5,000,000	10,000,000	1,700	2,350
10,000,000	And over	3,325	4,650

A daily charge shall be made for every day shown on the calendar beyond the specified contract time in calendar days.

**RETURN WITH BID**

4. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, supplemental and applicable recurring special provisions, addenda, form of contract and contract bonds, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal he/she waives all right to plead any misunderstanding regarding the same.
  
5. **EXECUTION OF CONTRACT AND CONTRACT BONDS.** The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
  
6. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	
Up to	\$5,000	\$150	\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to	\$10,000	\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to	\$50,000	\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to	\$100,000	\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to	\$150,000	\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to	\$250,000	\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to	\$500,000	\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to	\$1,000,000	\$25,000,000	to	\$30,000,000	\$800,000
\$1,000,000	to	\$1,500,000	\$30,000,000	to	\$35,000,000	\$900,000
\$1,500,000	to	\$2,000,000	over		\$35,000,000	\$1,000,000

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

If a combination bid is submitted, the proposal guaranties which accompany the individual proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is \_\_\_\_\_ \$( \_\_\_\_\_ ). If this proposal is accepted and the undersigned shall fail to execute contract bonds as required herein, it is hereby agreed that the amount of the proposal guaranty shall become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bonds; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

**Attach Cashier's Check or Certified Check Here**

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found.

The proposal guaranty check will be found in the proposal for:                      Item \_\_\_\_\_

Airport \_\_\_\_\_

**Mark the proposal cover sheet as to the type of proposal guaranty submitted.**

## RETURN WITH BID

- 7. COMBINATION BIDS.** The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided below.

A combination bid is a total bid received on 2 or more proposals. No combination bids other than those specifically set up by the Department will be considered. Separate proposal forms will be issued for each project in the combination so bids may be submitted on the combination as well as on separate units of the combination. The Department reserves the right to make awards on combination bids or separate bids to the best advantage of the Department.

If a combination bid is submitted on 2 or more proposals, separate proposals on each individual contract shall also be submitted, and unless separate proposals are so submitted, the combination bid will not be considered. If the bidder desires to submit a combination bid, the bidder shall state, in the place provided in the proposal form, the amount of the combination bid for the entire combination.

If a combination bid is submitted on any stipulated combination, and errors are found to exist in computing the gross sum bid on any one or more of the individual proposals, corrections shall be made, by the Department and the amount of the combination bid shall be corrected so that it will be in the same proportion to the sum of the corrected gross sum bid as the combination bid submitted was to the sum of the gross sum bid submitted.

The following provisions shall govern combination bidding:

- (a) A combination bid which is submitted for 2 or more proposals and awarded on that basis shall have the bid prorated against each proposal in proportion to the bid submitted for each proposal.
- (b) Separate contracts shall be executed for each individual proposal included in the combination.
- (c) The contract time for all contracts awarded on a combination bid shall be the sum of all calendar days contained within each contract included in the combination, unless otherwise provided in the contracts.
- (d) In the event the Contractor fails to complete any or all of the contracts on the combination bid within the contract time, including any authorized extension, the liquidated damages shall be determined from the schedule of deductions shown above in paragraph 3 for each day of overrun in contract time, based on the combination bid total, and shall be computed on the combination and prorated against the 2 or more individual contracts based on the dollar value of each contract.
- (e) The plans and Special Provisions for each separate contract shall be construed separately for all requirements, except as described in paragraphs (a) through (d) listed above.

**RETURN WITH BID**

**When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.**

**If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.**

**Schedule of Combination Bids**

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

8. **SCHEDULE OF PRICES.** The undersigned submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.

9. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.

10. **The services of a subcontractor will or may be used.**

Check box Yes

Check box No

For known subcontractors with subcontracts with an annual value of more than \$25,000, the contract shall include their name, address, and the dollar allocation for each subcontractor.

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STATE JOB #- - - -

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
 CONTRACT NUMBER - SC066

ECMS002 DTGECM03 ECMR003 PAGE 1  
 RUN DATE - 01/21/11  
 RUN TIME - 235458

COUNTY NAME	CODE	DIST	AIRPORT NAME	FED PROJECT	ILL PROJECT
ST CLAIR	163	08	MIDAMERICA ST. LOUIS	3-17-0146-XX	BL-V -4061

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR108108	1/C #8 5 KV UG CABLE	L.F.	976.000 X		=		
AR108602	3/C #2 600 V UG CABLE	L.F.	332.000 X		=		
AR108606	3/C #6 600 V UG CABLE	L.F.	64.000 X		=		
AR108706	1/C #6 COUNTERPOISE	L.F.	1,014.000 X		=		
AR110202	2" PVC DUCT, DIRECT BURY	L.F.	674.000 X		=		
AR110501	1-WAY CONC. ENCASED DUCT	L.F.	305.000 X		=		
AR110502	2-WAY CONCRETE ENCASED DUCT	L.F.	295.000 X		=		
AR110503	3-WAY CONCRETE ENCASED DUCT	L.F.	38.000 X		=		
AR110610	ELECTRICAL HANDHOLE	EACH	2.000 X		=		
AR125415	MITL-BASE MOUNTED	EACH	4.000 X		=		
AR125565	SPLICE CAN	EACH	1.000 X		=		
AR125962	RELOCATE BASE MOUNTED LIGHT	EACH	3.000 X		=		
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1.000 X		=		
AR150520	MOBILIZATION	L.S.	1.000 X		=		
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	8,640.000 X		=		

MIDAMERICA ST. LOUIS  
ST CLAIR

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF PRICES  
CONTRACT NUMBER - SC066

ECMS002 DTGECM03 ECMR003 PAGE 2  
RUN DATE - 01/21/11  
RUN TIME - 235458

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR155540	BY-PRODUCT LIME	TON	381.000 X		=		
AR155612	SOIL PROCESSING-12"	S.Y.	15,108.000 X		=		
AR156510	SILT FENCE	L.F.	1,500.000 X		=		
AR156511	DITCH CHECK	EACH	6.000 X		=		
AR156531	EROSION CONTROL BLANKET	S.Y.	2,310.000 X		=		
AR209609	CRUSHED AGG. BASE COURSE-9"	S.Y.	16,355.000 X		=		
AR209611	CRUSHED AGGREGATE BASE COURSE-11"	S.Y.	469.000 X		=		
AR302611	ASPHALT TREATED PERMEABLE SUBBASE	S.Y.	14,621.000 X		=		
AR302630	ATPS TEST SECTION	EACH	1.000 X		=		
AR401610	BITUMINOUS SURFACE COURSE	TON	220.000 X		=		
AR401650	BITUMINOUS PAVEMENT MILLING	S.Y.	2,317.000 X		=		
AR403610	BITUMINOUS BASE COURSE	TON	220.000 X		=		
AR501509	9" PCC PAVEMENT	S.Y.	1,000.000 X		=		
AR501516	16" PCC PAVEMENT	S.Y.	13,333.000 X		=		
AR501530	PCC TEST BATCH	EACH	1.000 X		=		



MIDAMERICA ST. LOUIS  
ST CLAIR

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF PRICES  
CONTRACT NUMBER - SC066

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RUN DATE - 01/21/11  
RUN TIME - 235458

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR602510	BITUMINOUS PRIME COAT	GAL.	6,309.000 X		=		
AR603510	BITUMINOUS TACK COAT	GAL.	239.000 X		=		
AR620520	PAVEMENT MARKING-WATERBORNE	S.F.	1,433.000 X		=		
AR620525	PAVEMENT MARKING-BLACK BORDER	S.F.	1,883.000 X		=		
AR701524	24" RCP, CLASS IV	L.F.	559.000 X		=		
AR701530	30" RCP, CLASS IV	L.F.	415.000 X		=		
AR701900	REMOVE PIPE	L.F.	68.000 X		=		
AR705526	6" PERFORATED UNDERDRAIN W/SOCK	L.F.	1,578.000 X		=		
AR705635	UNDERDRAIN COLLECTION STRUCTURE	EACH	8.000 X		=		
AR705640	UNDERDRAIN CLEANOUT	EACH	8.000 X		=		
AR751540	MANHOLE 4'	EACH	2.000 X		=		
AR752424	PRECAST REINFORCED CONC. FES 24"	EACH	2.000 X		=		
AR752430	PRECAST REINFORCED CONC. FES 30"	EACH	1.000 X		=		
AR752900	REMOVE END SECTION	EACH	2.000 X		=		
AR770508	8" SANITARY SEWER	L.F.	132.000 X		=		

MIDAMERICA ST. LOUIS  
ST CLAIR

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF PRICES  
CONTRACT NUMBER - SC066

ECMS002 DTGECM03 ECMR003 PAGE 4  
RUN DATE - 01/21/11  
RUN TIME - 235458

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR770515	15" SANITARY SEWER	L.F.	341.000 X		=		
AR770704	SANITARY MANHOLE 4'	EACH	1.000 X		=		
AR801971	4' X 20' TRENCH DRAIN	EACH	1.000 X		=		
AR801972	8" VALVE & ACTUATOR	EACH	1.000 X		=		
AR801973	CONTROL SWITCHES	L.S.	1.000 X		=		
AR801974	REMOVE FUMIGATION FACILITY	L.S.	1.000 X		=		
AR801975	REINSTALL FUMIGATION FACILITY	L.S.	1.000 X		=		
AR801976	AIRCRAFT NOSE TETHER ANCHOR	EACH	2.000 X		=		
AR801977	TYPE TC-2-#12, 1-#12 GND, 600V	L.F.	495.000 X		=		
AR801978	TYPE TC-7-#14, 600V	L.F.	495.000 X		=		
AR901510	SEEDING	ACRE	7.100 X		=		
AR904510	SODDING	S.Y.	500.000 X		=		
AR908510	MULCHING	ACRE	7.100 X		=		

TOTAL \$

NOTE:  
\*\*\* PLEASE TURN PAGE FOR IMPORTANT NOTES \*\*\*

MIDAMERICA ST. LOUIS  
ST CLAIR

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SCHEDULE OF PRICES  
CONTRACT NUMBER - SC066

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RUN DATE - 01/21/11  
RUN TIME - 235458

NOTE:

1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.
2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.
3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

**RETURN WITH BID**

**THE PRECEDING SCHEDULE OF PRICES MUST BE**

**COMPLETED AND RETURNED.**

# RETURN WITH BID

## STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

### I. GENERAL

**A.** Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

**B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

**C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the chief procurement officer to void the contract, or subcontract, and may result in the suspension or debarment of the bidder or subcontractor.

### II. ASSURANCES

The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

#### **A. Conflicts of Interest**

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

# RETURN WITH BID

## **B. Negotiations**

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

(a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

## **C. Inducements**

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

## **D. Revolving Door Prohibition**

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, State purchasing officers, procurement compliance monitors, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

## **E. Reporting Anticompetitive Practices**

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offers, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

2. The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid is submitted.

## **F. Confidentiality**

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

2. The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

## **I. Insider Information**

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

2. The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

# RETURN WITH BID

## III. CERTIFICATIONS

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. Section 50-2 of the Illinois Procurement Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible chief procurement officer whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

### A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

### B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any of the certifications required by this Section are false.

### C. Debt Delinquency

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency. The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Procurement Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the chief procurement officer may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

# RETURN WITH BID

## **D. Prohibited Bidders, Contractors and Subcontractors**

1. The Illinois Procurement Code provides:

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

## **E. Section 42 of the Environmental Protection Act**

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

## **F. Educational Loan**

1. Section 3 of the Educational Loan Default Act provides:

§ 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

## **G. Bid-Rigging/Bid Rotating**

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

(b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

2. The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.



## RETURN WITH BID

### **H. International Anti-Boycott**

1. Section 5 of the International Anti-Boycott Certification Act provides:

§ 5. State contracts. Every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

2. The bidder makes the certification set forth in Section 5 of the Act.

### **I. Drug Free Workplace**

1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

### **J. Disclosure of Business Operations in Iran**

Section 50-36 of the Illinois Procurement Code, 30ILCS 50/50-36 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

(1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.

(2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

The terms "Business operations", "Company", "Mineral-extraction activities", "Oil-related activities", "Petroleum resources", and "Substantial action" are all defined in the Code.

Failure to make the disclosure required by the Code shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, offer, or proposal or awarding the contract. The name of each Company disclosed as doing business or having done business in Iran will be provided to the State Comptroller.

**Check the appropriate statement:**

Company has no business operations in Iran to disclose.

Company has business operations in Iran as disclosed in the attached document.

## RETURN WITH BID

### **K. Apprenticeship and Training Certification (Does not apply to federal aid projects)**

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontracted work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.**

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N/A (Federal)

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The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

### **L. Political Contributions and Registration with the State Board of Elections.**

Sections 20-160 and 50-37 of the Illinois Procurement Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of \$50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated entities or affiliated persons whose state contracts in the current year do not exceed an awarded value of \$50,000, either alone or in combination with contracts not exceeding \$50,000, are prohibited from making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals is issued and ending on the day after the date of award or selection if the entity was not awarded or selected. Section 20-160 requires certification of registration of affected business entities in accordance with procedures found in Section 9-35 of The Election Code

By submission of a bid, the contractor business entity acknowledges and agrees that it has read and understands Sections 20-160 and 50-37 of the Illinois Procurement Code, and that it makes the following certification:

**The undersigned business entity certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. A copy of the certificate of registration shall be submitted with the bid. The bidder is cautioned that the Department will not award a contract without submission of the certificate of registration.**

These requirements and compliance with the above referenced statutory sections are a material part of the contract, and any breach thereof shall be cause to void the contract under Section 50-06 of the Illinois Procurement Code. These provisions do not apply to federal-aid contracts.

**RETURN WITH BID**

**M. Lobbyist Disclosure**

Section 50-38 of the Illinois Procurement Code requires that any bidder or offeror on a State contract that hires a person required to register under the Lobbyist Registration Act to assist in obtaining a contract shall:

- (i) Disclose all costs, fees, compensation, reimbursements, and other remunerations paid or to be paid to the lobbyist related to the contract,
- (ii) Not bill or otherwise cause the State of Illinois to pay for any of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration, and
- (iii) Sign a verification certifying that none of the lobbyist's costs, fees, compensation, reimbursements, or other remuneration were billed to the State.

This information, along with all supporting documents, shall be filed with the agency awarding the contract and with the Secretary of State. The chief procurement officer shall post this information, together with the contract award notice, in the online Procurement Bulletin.

Pursuant to Subsection (c) of this Section, no person or entity shall retain a person or entity to attempt to influence the outcome of a procurement decision made under the Procurement Code for compensation contingent in whole or in part upon the decision or procurement. Any person who violates this subsection is guilty of a business offense and shall be fined not more than \$10,000.

Bidder acknowledges that it is required to disclose the hiring of any person required to register pursuant to the Illinois Lobbyist Registration Act (25 ILCS 170) in connection with this contract.

Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.

Or

Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:

Name and address of person: \_\_\_\_\_  
All costs, fees, compensation, reimbursements and other remuneration paid to said person: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## RETURN WITH BID

### IV. DISCLOSURES

- A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The bidder further certifies that the Department has received the disclosure forms for each bid.

The chief procurement officer may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Procurement Code. Furthermore, the chief procurement officer may void the contract and the surety providing the performance bond shall be responsible for completion of the contract.

#### **B. Financial Interests and Conflicts of Interest**

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Procurement Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.**

#### **C. Disclosure Form Instructions**

##### **Form A Instructions for Financial Information & Potential Conflicts of Interest**

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES \_\_\_\_\_ NO \_\_\_\_\_.
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$106,447.20? YES \_\_\_\_\_ NO \_\_\_\_\_.
3. Does anyone in your organization receive more than \$106,447.20 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES \_\_\_\_\_ NO \_\_\_\_\_.
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$106,447.20? YES \_\_\_\_\_ NO \_\_\_\_\_.

(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable.** The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

## RETURN WITH BID

### **Form B: Instructions for Identifying Other Contracts & Procurement Related Information**

Disclosure Form B must be completed for each bid submitted by the bidding entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**Form A  
Financial Information &  
Potential Conflicts of Interest  
Disclosure**

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$10,000, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

**DISCLOSURE OF FINANCIAL INFORMATION**

**1. Disclosure of Financial Information.** The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$106,447.20 (60% of the Governor's salary as of 7/1/2007). **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

<b>FOR INDIVIDUAL (type or print information)</b>
<b>NAME:</b> _____
<b>ADDRESS</b> _____
<b>Type of ownership/distributable income share:</b>
stock _____ sole proprietorship _____ partnership _____ other: (explain on separate sheet)
% or \$ value of ownership/distributable income share: _____

**2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes\_\_\_\_ No\_\_\_\_

If your answer is yes, please answer each of the following questions.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes\_\_\_\_ No\_\_\_\_
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) provide the name of the State agency for which you are employed and your annual salary.

\_\_\_\_\_

\_\_\_\_\_

**RETURN WITH BID**

- 3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_

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(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years. Yes \_\_\_\_\_ No \_\_\_\_\_

If your answer is yes, please answer each of the following questions.

- 1. Is your spouse or any minor children currently an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority? Yes \_\_\_\_\_ No \_\_\_\_\_
- 2. Is your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.  
\_\_\_\_\_  
\_\_\_\_\_
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) and amount in excess of the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_

---

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes \_\_\_\_\_ No \_\_\_\_\_

---

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter Yes \_\_\_\_\_ No \_\_\_\_\_

---

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes \_\_\_\_\_ No \_\_\_\_\_

---

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_\_ No \_\_\_\_\_

---

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes \_\_\_\_\_ No \_\_\_\_\_

---

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_\_ No \_\_\_\_\_

---

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections Yes \_\_\_\_\_ No \_\_\_\_\_

---

**RETURN WITH BID**

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes\_\_\_\_ No\_\_\_\_

**3. Communication Disclosure.**

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**4. Debarment Disclosure.** For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): \_\_\_\_\_

Nature of disclosure: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**APPLICABLE STATEMENT**

**This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.**

Completed by:  \_\_\_\_\_ Date \_\_\_\_\_  
Signature of Individual or Authorized Officer

**NOT APPLICABLE STATEMENT**

**Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.**

**This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.**

\_\_\_\_\_ Date \_\_\_\_\_  
Signature of Authorized Officer

The bidder has a continuing obligation to supplement these disclosures under Sec. 50-35 of the Procurement Code.



**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**Form B  
Other Contracts &  
Procurement Related Information  
Disclosure**

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$10,000, and for all open-ended contracts.

**DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION**

**1. Identifying Other Contracts & Procurement Related Information.** The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency:  
Yes \_\_\_\_\_ No \_\_\_\_\_.

If **“No” is checked**, the bidder only needs to complete the signature box on the bottom of this page.

**2. If “Yes” is checked.** Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

**THE FOLLOWING STATEMENT MUST BE CHECKED**

<input type="checkbox"/>	_____	_____
	Signature of Authorized Representative	Date

## RETURN WITH BID

### SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

#### CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



**RETURN WITH BID**

**PART II. WORKFORCE PROJECTION - continued**

- B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) \_\_\_\_\_ new hires would be recruited from the area in which the contract project is located; and/or (number) \_\_\_\_\_ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

- C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) \_\_\_\_\_ persons will be directly employed by the prime contractor and that (number) \_\_\_\_\_ persons will be employed by subcontractors.

**PART III. AFFIRMATIVE ACTION PLAN**

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company \_\_\_\_\_ Telephone Number \_\_\_\_\_  
 \_\_\_\_\_

Address \_\_\_\_\_

<b>NOTICE REGARDING SIGNATURE</b>
-----------------------------------

<p>The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed if revisions are required.</p>
--

<p>Signature: <input type="checkbox"/> _____ Title: _____ Date: _____</p>
---

- Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.
- Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
- Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.
- Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

## RETURN WITH BID

**CERTIFICATIONS REQUIRED BY STATE AND/OR FEDERAL LAW.** The bidder is required by State and/or Federal law to make the below certifications and assurances as a part of the proposal and contract upon award. It is understood by the bidder that the certifications and assurances made herein are a part of the contract.

By signing the Proposal Signature Sheet, the bidder certifies that he/she has read and completed each of the following certifications and assurances, that required responses are true and correct and that the certified signature of the Proposal Signature Sheet constitutes an endorsement and execution of each certification and assurance as though each was individually signed:

A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.

B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:

1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause.  
YES\_\_\_\_\_ NO\_\_\_\_\_
2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES\_\_\_\_\_ NO\_\_\_\_\_

C. BUY AMERICAN - STEEL AND MANUFACTURED PRODUCTS FOR CONSTRUCTION CONTRACTS (JAN 1991)

(a) The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:

1. Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs (b)(1) or (2) shall be treated as domestic.
2. Components. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.
3. Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

(b) The successful bidder will be required to assure that only domestic steel and manufactured products will be used by the Contractor, subcontractors, materialmen, and suppliers in the performance of this contract, except those-

- (1) that the U.S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities of a satisfactory quality;
- (2) that the U.S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or
- (3) that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

(End of Clause)

**RETURN WITH BID**

**D. BUY AMERICAN CERTIFICATE (JAN 1991)**

By submitting a bid/proposal under this solicitation, except for those items listed by the offeror below or on a separate and clearly identified attachment to this bid/proposal, the offeror certifies that steel and each manufactured product, is produced in the United States (as defined in the clause Buy American - Steel and Manufactured Products or Buy American - Steel and Manufactured Products For Construction Contracts) and that components of unknown origin are considered to have been produced or manufactured outside the United States.

Offerors may obtain from (IDOT, Division of Aeronautics) lists of articles, materials, and supplies excepted from this provision.

PRODUCT

COUNTRY OF ORIGIN

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**E. 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 undersigned 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).

**F. NON-APPROPRIATION CLAUSE**

By submitting a bid/proposal under this solicitation the offeror certifies that he/she understands that obligations of the State will cease immediately without penalty or further payment being required in any fiscal year the Illinois General Assembly fails to appropriate or otherwise make available sufficient funds for this contract.

- G. Contractor is not delinquent in the payment of any debt to the State (or if delinquent has entered into a deferred payment plan to pay the debt), and Contractor acknowledges the contracting state agency may declare the contract void if this certification is false (30 ILCS 500/50-11, effective July 1, 2002).

## RETURN WITH BID

### NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway in Springfield, Illinois until 10:00 o'clock a.m., March 11, 2011. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
2. **DESCRIPTION OF WORK.** The proposed improvement, shown in detail on the plans issued by the Department includes, in general, the following described work:

**Mike Apron Expansion**
3. **INSTRUCTIONS TO BIDDERS.**
  - (a) This Notice, the invitation for bids, proposal and award shall, together with all other documents in accordance with Article 10-15 of the Illinois Standard Specifications for Construction of Airports, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
  - (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
4. **AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the proposal 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.** There will be a mandatory pre-bid conference held at 2:00 PM on Wednesday February 23, 2011 on the 2<sup>nd</sup> Floor of the Terminal Building at MidAmerica St. Louis Airport, 6956 Air Terminal Drive. Potential bidders arriving after 2:00 PM will not be counted in the attendance. For engineering information, contact Brian Garkie of Crawford Murphy & Tilly, Inc. at (314) 571-9070.
6. **DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 18.0%.
7. **SPECIFICATIONS AND DRAWINGS.** The work shall be done in accordance with the Illinois Standard Specifications for Construction of Airports, the Illinois Division of Aeronautics Supplemental Specifications and Recurring Special Provisions, the Special Provisions dated January 14, 2010 and the Construction Plans dated January 14, 2011 as approved by the Department of Transportation, Division of Aeronautics.
8. **INSPECTION OF RECORDS.** The Contractor shall maintain an acceptable cost accounting system. The Sponsor, the FAA, and the Comptroller General of the United States shall have access to any books, documents, paper, and records of the Contractor which are directly pertinent to the specific contract for the purposes of making an audit, examination, excerpts, and transcriptions. The Contractor shall maintain all required records for three years after the Sponsor makes final payment and all other pending matters are closed.
9. **RIGHTS TO INVENTIONS.** All rights to inventions and materials generated under this contract are subject to Illinois law and to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed. Information regarding these rights is available from the FAA and the Sponsor.

## RETURN WITH BID

### 10. TERMINATION OF CONTRACT.

1. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.
2. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.
3. If the termination is due to failure to fulfill the Contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the Contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.
4. If, after notice of termination for failure to fulfill contract obligations, it is determined that the Contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.
5. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

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

#### a. Additive Alternates

- (1) Bidders must submit a bid for the Base Bid and for all Additive Alternates.
- (2) Award of this contract will be made to the lowest responsible qualified bidder computed as follows:

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

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

#### b. Optional Alternates

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

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

### 12. 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 130 calendar days.

### 13. 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.

### 14. 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.



## RETURN WITH BID

- 15. ADDENDA AND REVISIONS:** It is the contractor's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum will be placed with the contract number. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that the bidder check IDOT's website at <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

***IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL RELATED FAILURES.***

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1624 or [Timothy.Garman@illinois.gov](mailto:Timothy.Garman@illinois.gov).

**RETURN WITH BID**

**PROPOSAL SIGNATURE SHEET**

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 4 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

Firm Name \_\_\_\_\_

(IF AN INDIVIDUAL)

Signature of Owner \_\_\_\_\_

Business Address \_\_\_\_\_

Firm Name \_\_\_\_\_

By \_\_\_\_\_

(IF A CO-PARTNERSHIP)

Business Address \_\_\_\_\_

Name and Address of All Members of the Firm:

\_\_\_\_\_

\_\_\_\_\_

Corporate Name \_\_\_\_\_

Corporate Seal

By \_\_\_\_\_

President

(IF A CORPORATION)

Attest \_\_\_\_\_

Corporate Secretary

Business Address \_\_\_\_\_

Name of Corporate Officers:

\_\_\_\_\_ President \_\_\_\_\_ Corporate Secretary \_\_\_\_\_ Treasurer

**NOTARY CERTIFICATION**

STATE OF ILLINOIS,

**ALL SIGNATURES MUST BE NOTARIZED**

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for said county, do hereby certify that \_\_\_\_\_

AND

(Insert names of individual(s) signing on behalf of bidder)

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

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_, A.D. \_\_\_\_\_

My commission expires \_\_\_\_\_ (Seal)

Notary Public



Sponsor \_\_\_\_\_ Item No. \_\_\_\_\_

IL Proj. No. \_\_\_\_\_ AIP Proj. No. \_\_\_\_\_ Letting Date \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, That We \_\_\_\_\_

as PRINCIPAL, and \_\_\_\_\_

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

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

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

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

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

PRINCIPAL

SURETY

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Company Name)

By \_\_\_\_\_  
(Signature & Title)

By: \_\_\_\_\_  
(Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,  
County of \_\_\_\_\_

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

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

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

My commission expires \_\_\_\_\_  
\_\_\_\_\_  
Notary Public

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

Electronic Bid Bond ID# \_\_\_\_\_ Company / Bidder Name \_\_\_\_\_ Signature and Title \_\_\_\_\_



# PROPOSALS

for construction work advertised for bids by the Illinois Department of Transportation

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

Bidders should affix this form to the front of a 10" x 13" envelope and use that envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326  
Illinois Department of Transportation  
2300 South Dirksen Parkway  
Springfield, Illinois 62764

**NOTICE**

**Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.**

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

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## NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.



**Illinois Department of Transportation**

## **SUBCONTRACTOR DOCUMENTATION**

P.A. 96-0795, effective July 1, 2010, enacted substantial changes to the provisions of the Illinois Procurement Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Chief Procurement Officer within 20 calendar days after execution of the subcontract.

The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Illinois Procurement Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled State Required Ethical Standards Governing Subcontractors.

## RETURN WITH SUBCONTRACT

### STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The chief procurement officer may terminate or void the subcontract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification.

Section 50-2 of the Illinois Procurement Code provides that every person that has entered into a multi-year contract and every subcontractor with a multi-year subcontract shall certify, by July 1 of each fiscal year covered by the contract after the initial fiscal year, to the responsible chief procurement officer whether it continues to satisfy the requirements of Article 50 pertaining to the eligibility for a contract award. If a contractor or subcontractor is not able to truthfully certify that it continues to meet all requirements, it shall provide with its certification a detailed explanation of the circumstances leading to the change in certification status. A contractor or subcontractor that makes a false statement material to any given certification required under Article 50 is, in addition to any other penalties or consequences prescribed by law, subject to liability under the Whistleblower Reward and Protection Act for submission of a false claim.

#### **A. Bribery**

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

#### **B. Felons**

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any of the certifications required by this Section are false.

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**C. Debt Delinquency**

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder or subcontractor, respectively, certifies that it, or any affiliate, is not barred from being awarded a contract or subcontract under the Procurement Code. Section 50-11 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency, or entering into a subcontract, if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The bidder or contractor or subcontractor, respectively, further acknowledges that the chief procurement officer may declare the related contract void if this certification is false or if the bidder, contractor, or subcontractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

**D. Prohibited Bidders, Contractors and Subcontractors**

1. The Illinois Procurement Code provides:

Section 50-10.5 and 50-60(c). Prohibited bidders, contractors and subcontractors.

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction.. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

**E. Section 42 of the Environmental Protection Act**

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

**The undersigned, on behalf of the subcontracting company, has read and understands the above certifications and makes the certifications as required by law.**

_____ Name of Subcontracting Company		
_____ Authorized Officer	_____ Date	



## RETURN WITH SUBCONTRACT

### SUBCONTRACTOR DISCLOSURES

#### I. DISCLOSURES

- A. The disclosures hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed. The subcontractor further certifies that the Department has received the disclosure forms for each subcontract.

The chief procurement officer may void the bid, contract, or subcontract, respectively, if it is later determined that the bidder or subcontractor rendered a false or erroneous disclosure. A contractor or subcontractor may be suspended or debarred for violations of the Procurement Code. Furthermore, the chief procurement officer may void the contract or subcontract.

#### B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all subcontracts of more than \$10,000 shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

In addition, all disclosures shall indicate any other current or pending contracts, subcontracts, proposals, leases, or other ongoing procurement relationships the subcontracting entity has with any other unit of state government and shall clearly identify the unit and the contract, subcontract, proposal, lease, or other relationship.

2. Disclosure Forms. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.**

#### C. Disclosure Form Instructions

##### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity?  
YES \_\_\_\_\_ NO \_\_\_\_\_
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$106,447.20?  
YES \_\_\_\_\_ NO \_\_\_\_\_
3. Does anyone in your organization receive more than \$106,447.20 of the subcontracting entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES \_\_\_\_\_ NO \_\_\_\_\_
4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than \$106,447.20? YES \_\_\_\_\_ NO \_\_\_\_\_

(Note: Only one set of forms needs to be completed per person per subcontract even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the subcontracting entity or the subcontracting entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable.** The person signing can be, but does not have to be, the person for which the form is being completed. The subcontractor is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the NOT APPLICABLE STATEMENT on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

## RETURN WITH SUBCONTRACT

### **Form B: Instructions for Identifying Other Contracts & Procurement Related Information**

Disclosure Form B must be completed for each subcontract submitted by the subcontracting entity. *Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.*

The Subcontractor shall identify, by checking Yes or No on Form B, whether it has any pending contracts, subcontracts, leases, bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the subcontractor only needs to complete the check box on the bottom of Form B. If "Yes" is checked, the subcontractor must list all non-IDOT State of Illinois agency pending contracts, subcontracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts or subcontracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included.

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**Form A  
Subcontractor: Financial  
Information & Potential Conflicts  
of Interest Disclosure**

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$10,000, and for all open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

**DISCLOSURE OF FINANCIAL INFORMATION**

**1. Disclosure of Financial Information.** The individual named below has an interest in the SUBCONTRACTOR (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$106,447.20 (60% of the Governor's salary as of 7/1/07). **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

<b>FOR INDIVIDUAL (type or print information)</b>	
<b>NAME:</b>	_____
<b>ADDRESS</b>	_____
<b>Type of ownership/distributable income share:</b>	
stock _____	sole proprietorship _____ Partnership _____ other: (explain on separate sheet):
% or \$ value of ownership/distributable income share: _____	

**2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes \_\_\_\_\_ No \_\_\_\_\_

If your answer is yes, please answer each of the following questions.

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_\_\_ No \_\_\_\_\_
- Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) provide the name the State agency for which you are employed and your annual salary \_\_\_\_\_

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3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_
4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_

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(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years. Yes \_\_\_\_\_ No \_\_\_\_\_

If your answer is yes, please answer each of the following questions.

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_\_\_ No \_\_\_\_\_
2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$106,447.20, (60 % of the Governor's salary as of 7/1/07) provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. \_\_\_\_\_
3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$106,447.20, (60% of the salary of the Governor as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_
4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_\_\_ No \_\_\_\_\_

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(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes \_\_\_\_\_ No \_\_\_\_\_

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(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_\_ No \_\_\_\_\_

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(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes \_\_\_\_\_ No \_\_\_\_\_

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(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_\_ No \_\_\_\_\_

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(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes \_\_\_\_\_ No \_\_\_\_\_

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**RETURN WITH SUBCONTRACT**

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_\_ No \_\_\_\_\_

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes \_\_\_\_\_ No \_\_\_\_\_

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes \_\_\_\_\_ No \_\_\_\_\_

**APPLICABLE STATEMENT**

**This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.**

Completed by:  \_\_\_\_\_ Date \_\_\_\_\_  
Signature of Individual or Authorized Officer

**NOT APPLICABLE STATEMENT**

**Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.**

**This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page.**

\_\_\_\_\_ Date \_\_\_\_\_  
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Procurement Related Information Disclosure

Form with fields: Subcontractor Name, Legal Address, City, State, Zip, Telephone Number, Email Address, Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$10,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes \_\_\_\_\_ No \_\_\_\_\_

If "No" is checked, the subcontractor only needs to complete the signature box on the bottom of this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature box with a checkbox and lines for Signature of Authorized Officer and Date

## CONTRACT REQUIREMENTS

(1) Airport Improvement Program projects. The work in this contract is included in the federal Airport Improvement Program and is being undertaken and accomplished by the Illinois Department of Transportation, Division of Aeronautics and the Municipality, hereinafter called the Co-Sponsors, in accordance with the terms and conditions of a Grant Agreement between the Co-Sponsors and the United States, under the Airport and Airway Improvement Act of 1982 (Public Law 97-248; Title V, Section 501 et seq., September 3, 1982; 96 Stat. 671; codified at 49 U.S.C Section 2201 et seq.) and Part 152 of the Federal Aviation Regulations (14 CFR Part 152), pursuant to which the United States has agreed to pay a certain percentage of the costs of the Project that are determined to be allowable Project costs under the Act. The United States is not a party to this contract and no reference in this contract to FAA or representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the contract, makes the United States a party to this contract.

(2) Consent of Assignment. The Contractor shall obtain the prior written consent of the Co-Sponsors to any proposed assignment of any interest in or part of this contract.

(3) Convict Labor. No convict labor may be employed under this contract.

(4) Veterans Preference. In the employment of labor, except in executive, administrative, and supervisory positions, preference shall be given to veterans of the Vietnam era and disabled veterans as defined in Section 515(c) of the Airport and Airway Improvement Act of 1982. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

(5) Withholding: Sponsor from Contractor. Whether or not payments or advances to the Co-Sponsors are withheld or suspended by the FAA, the Co-Sponsors may withhold or cause to be withheld from the Contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the Contractor or any subcontractor on the work the full amount of wages required by this contract.

(6) Nonpayment of Wages. If the Contractor or subcontractor fails to pay any laborer or mechanic employed or working on the site of the work any of the wages required by this contract the Co-Sponsors may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment or advance of funds until the violations cease.

(7) FAA Inspection and Review. The Contractor shall allow any authorized representative of the FAA to inspect and review any work or materials used in the performance of this contract.

(8) Subcontracts. The Contractor shall insert in each of his subcontracts the provisions contained in Paragraphs (1), (3), (4), (5), (6), and (7) above and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(9) Contract Termination. A breach of Paragraph (6), (7), and (8) above may be grounds for termination of the contract.

PROVISIONS REQUIRED BY THE REGULATIONS  
OF THE SECRETARY OF LABOR  
29 CFR 5.5

(a) Contract Provisions and Related Matters.

(1) Minimum Wages.

Revised 1/92

(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 regulations issued 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 equivalents 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 provision of paragraph (a)(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 paragraph 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 paragraph (a)(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 be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics 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 therefor only when the following criteria have been met:

- (1)The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2)The classification is utilized in the area by the construction industry; and
- (3)The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(ii)(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(ii)(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. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(ii)(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(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. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(2) Withholding. The Federal Aviation Administration shall upon its own action or 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 (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 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 work, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost 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. (Approved by the Office Management and Budget under OMB control numbers 1215-0140 and 1215-0017).

(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 paragraph 5.5(a)(3)(i) of Regulations, 29 CFR Part 5. This information may be submitted in any form desired.

Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB control number 1215-0149).

(ii)(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 maintained under paragraph 5.5(a)(3)(i) of Regulations, 29 CFR Part 5 and that such information is correct and complete;

(2) That each laborer or 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.

(ii)(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 (a)(3)(ii)(B) of this section.

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

#### (4) Apprentices and Trainees

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

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who 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 ration 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 contract 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 paragraph (a)(1) through (10) of this contract 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 an subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract determination: debarment. A breach of these contract clauses paragraphs (a)(1) through (10) and the 2nd clause (b)(1) through (5) below 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 referenced in this contract.

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

(10) Certification of Eligibility.

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

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

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

(b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), (4) and (5) of this section in full in AIP construction contracts in excess of \$2,000. These clauses shall be inserted in addition to the clauses required by paragraph 5.5(a) or paragraph 4.6 of Part 4 of this title. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements: No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen or guards (including apprentices and trainees described in paragraphs 5 and 6 above) shall require or permit any laborer, mechanic, watchman or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman or guard receives compensation at a rate not less than one and one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violations: Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the Contractor and any subcontractor responsible therefore shall be liable to any affected employee for his/her unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in 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, mechanic, watchman or guard employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10.00 for each calendar day on which such employee was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) 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 subparagraph (2) of this paragraph.

(4) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors 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 subparagraphs (1) through (4) of this paragraph.

(5) Working Conditions. No Contractor or subcontractor may require any laborer or mechanic employed in the performance of any contract to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards (29 CFR 1926) issued by Department of Labor.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in paragraph 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the Contractor or subcontractor will permit such representatives to interview employees during working hours on the job. (Approved by the Office of Management and Budget under OMB control numbers 1215-0140 and 1215-0017).

FEDERAL REGULATIONS VOL. 40, #74,  
WEDNESDAY, APRIL 16, 1975, PAGE 17124,  
ADMINISTRATION OF THE CLEAR AIR ACT  
& WATER POLLUTION CONTROL ACT  
(with respect to Federal Grants)

In connection with the administration of the Clean Air Act and the Water Pollution Control Act with respect to Federal Grants, specific requirements have been imposed of any contract which is not exempt under the provisions of 40 CFR 15.5.

(1) Any facility listed on the EPA List of Violating Facilities pursuant to Paragraph 15.20 of 40 CFR as of the date of the contract award will not be utilized in the performance of any non-exempt contract or subcontract.

(2) The Contractor shall comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 USC 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq. relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in Section 114 and Section 308 of the Air Act and Water Act, respectively, and all regulations and guidelines issued thereunder after the award of the contract.

(3) Prompt notification shall be required prior to contract award to the awarding official by the Contractor who will receive the award of the receipt of any communication from the Director, Office of Federal Activities, U.S. Environmental Protection Agency, indicating that a facility to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

(4) The Contractor shall include or cause to be included the criteria and requirements in paragraphs 1 through 4 in any non-exempt subcontract and will take such action as the Government may direct as a means of enforcing such provisions.

Attachment No. 1

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

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex 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 the behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or worker's representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of 24 September 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of 24 September 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of 24 September 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

## ATTACHMENT NO. 2

EACH PRIME CONTRACTOR SHALL INSERT IN EACH SUBCONTRACT THE CERTIFICATION IN APPENDIX B, AND FURTHER, SHALL REQUIRE ITS INCLUSION IN ANY LOWER TIER SUBCONTRACT, PURCHASE ORDER, OR TRANSACTION THAT MAY IN TURN BE MADE.

- Appendix B of 49 CFR Part 29 -

This certification applies to subcontractors, material suppliers, vendors and other lower tier participants.

Appendix B--Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions

### Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. 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 clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

### Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

STATE REQUIRED CONTRACT PROVISIONS  
ALL FEDERAL-AID CONSTRUCTION CONTRACTS

Effective February 1, 1969  
Revised January 2, 1973

The following provisions are State of Illinois requirements and are in addition to the Federal requirements.

"EQUAL EMPLOYMENT OPPORTUNITY"

In the event of the Contractor's noncompliance with any provisions of this Equal Employment Opportunity Clause, the Illinois Fair Employment Practices Act or the Fair Employment Practices Commission's Rules and Regulations for Public Contracts, the Contractor may be declared nonresponsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or avoided 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, national origin or ancestry; 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 Commission's Rules and Regulations for Public Contracts) 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, national origin or ancestry.
- (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 Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts. If any such 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 Fair Employment Practices Commission and the contracting agency 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 Fair Employment Practices Commission's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Commission or the contracting agency, and in all respects comply with the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.
- (6) That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Illinois Fair Employment Practices Commission for purposes of investigation to ascertain compliance with the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.
- (7) That it will include verbatim or by reference the provisions of paragraphs 1 through 7 of this clause in every performance subcontract as defined in Section 2.10(b) of the Commission's Rules and Regulations for Public Contracts so that such provisions will be binding upon every subcontractor; and that it will also so include the provisions or paragraphs 1, 5, 6 and 7 in every supply subcontract as defined in Section 2.10(a) of the Commission's Rules and Regulations for Public Contracts so that such provisions will be binding upon every such 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 all its subcontractors; and further it will promptly notify the contracting agency and the Illinois Fair Employment Practices Commission in the event any subcontractor fails or refuses to comply therewith. In addition, no Contractor will utilize any subcontractor declared by the Commission to be nonresponsible and therefore ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.



CONSTRUCTION CONTRACT PROCUREMENT POLICIES

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## SECTION 1

### PROPOSAL REQUIREMENTS AND CONDITIONS

1-01 ADVERTISEMENT (Notice to Bidders){ TC "1-01 ADVERTISEMENT (Notice to Bidders)" \f C \l "1" }. The State of Illinois shall publish the advertisement at such places and at such times as are required by local law or ordinances. The published advertisement shall state the time and place for submitting sealed proposals; a description of the proposed work; instructions to bidders as to obtaining proposal forms, plans, and specifications; proposal guaranty required; and the Owner's right to reject any and all bids.

For Federally assisted contracts the advertisement shall conform to the requirements of local laws and ordinances pertaining to letting of contracts and, in addition, shall conform to the requirements of the appropriate parts of the Federal Aviation Regulations applicable to the particular contract being advertised.

1-02 PREQUALIFICATION OF BIDDERS{ TC "1-02 PREQUALIFICATION OF BIDDERS" \f C \l "1" }.

- (a) When the awarding authority is the State of Illinois, each prospective bidder, prior to being considered for issuance of any proposal forms will be required to file, on forms furnished by the Department, an experience questionnaire and a confidential financial statement in accordance with the Department's Instructions for Prequalification of Contractors. The Statement shall include a complete report of the prospective bidder's financial resources and liabilities, equipment, past record and personnel, and must be submitted at least thirty (30) days prior to the scheduled opening of bids in which the Contractor is interested.

After the Department has analyzed the submitted "Contractor's Statement of Experience and Financial Condition" and related information and has determined appropriate ratings, the Department will issue to the Contractor a "Certificate of Eligibility". The Certificate will permit the Contractor to obtain proposal forms and plans for any Department of Transportation letting on work which is within the limits of the Contractor's potential as indicated on his "Certificate of Eligibility", subject to any limitations due to present work under contract or pending award as determined from the Contractor's submitted "Affidavit of Availability". Bidders intending to consistently submit proposals shall submit a "Contractor's Statement of Experience and Financial Condition" at least once a year. However, prequalification may be changed during that period upon the submission of additional favorable reports or upon reports of unsatisfactory performance.

Before a proposal is issued, the prospective bidder will be required to furnish an "Affidavit of Availability" indicating the location and amount of all uncompleted work under contract, or pending award, either as principal or subcontractor, as well as a listing of all subcontractors and value of work sublet to others. The prospective bidder may be requested to file a statement showing the amount and condition of equipment which will be available.

Before an award is made, the bidder may be required to furnish an outline of his plans for conducting the work.

- (b) When the awarding authority for contract construction work is the County Board of a county; the Council, the City Council, or the President and Board of Trustees of a city, village or town, each prospective bidder, in evidence of his competence, shall furnish the awarding authority as a prerequisite to the release of proposal forms by the awarding authority, a certified or photostatic copy of a "Certificate of Eligibility" issued by the Department of Transportation, in accordance with Section 1-02(a).

The two low bidders must file within 24 hours after the letting a sworn affidavit, in triplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work, using the blank form made available for this affidavit. One copy shall be filed with the awarding authority and two copies with the District Highway Office.

1-03 CONTENTS OF PROPOSAL FORMS{ TC "1-03 CONTENTS OF PROPOSAL FORMS" \f C \l "1" }. Upon request, the Department will furnish the prequalified bidders a proposal form. This form will state the location and description of the contemplated construction and will show the estimate of the various quantities and kinds of work to be performed or materials to be furnished, and will have a schedule of items for which unit bid prices are invited. The proposal form will state the time in which work must be completed, the amount of the proposal guaranty, labor requirements, and date, time and place of the opening of proposals. The form will also include any special provisions or requirements which vary from or are not contained in these specifications.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. Any addenda officially issued by the Department, will be considered a part of the proposal whether attached or not.

For Federally assisted contracts, the proposal shall conform to the requirements of local laws and ordinances pertaining to letting of contracts and, in addition, shall conform to the requirements of the appropriate parts of the Federal Aviation Regulations pertaining to the particular contract being let.

1-04 ISSUANCE OF PROPOSAL FORMS{ TC "1-04 ISSUANCE OF PROPOSAL FORMS" \f C \l "1" }. The Department shall refuse to issue a proposal form for any of the following reasons:

- (a) Lack of competency and adequate machinery, plant and other equipment, as revealed by the financial statement and experience questionnaires required under Section 1-02(a).
- (b) Uncompleted work which, in the judgment of the Department, might hinder or prevent the prompt completion of additional work if awarded.
- (c) False information provided on a bidder's "Affidavit of Availability".
- (d) Failure to pay, or satisfactorily settle, all bills due for labor and material on former contracts in force at the time of issuance of proposal forms.
- (e) Failure to comply with any prequalification regulations of the Department.
- (f) Default under previous contracts.
- (g) Unsatisfactory performance record as shown by past work for the Department, judged from the standpoint of workmanship and progress.
- (h) When the Contractor is suspended from eligibility to bid at a public letting where the contract is awarded by, or require approval of, the Department.
- (i) When any agent, servant, or employee of the prospective bidder currently serves as a member, employee, or agent of a governmental body that is financially involved in the proposed work.
- (j) When any agent, servant, or employee of the prospective bidder has participated in the preparation of plans or specifications for the proposed work.

1-05 INTERPRETATION OF QUANTITIES IN BID SCHEDULE{ TC "1-05 INTERPRETATION OF QUANTITIES IN BID SCHEDULE" \f C \l "1" }. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly or by implication agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 20 of the Illinois Standard Specifications for Construction of Airports without in any way invalidating the unit bid prices.

1-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE{ TC "1-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE" \f C \l "1" }. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Boring logs, underground utilities and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which he may make or obtain from his examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

1-07 PREPARATION OF THE PROPOSAL{ TC "1-07 PREPARATION OF THE PROPOSAL" \f C \l "1" }. The bidder shall submit his proposal on the form furnished by the Department. The proposal shall be executed properly, and bids shall be made for all items indicated in the proposal form, except that when alternate bids are asked, a bid on more than one alternate for each item is not required, unless otherwise provided. The bidder shall indicate, in figures, a unit price for each of the separate items called for in the proposal; he shall show the products of the respective quantities and unit prices in the column provided for that purpose, and the gross sum shown in the place indicated in the proposal shall be the summation of said products. All writing shall be with ink or typewriter, except the signature of the bidder which shall be written with ink.

If the proposal is made by an individual, his name and business address shall be shown. If made by a firm or partnership, the name and business address of each member of the firm or partnership shall be shown. If made by a corporation, the proposal shall show the names, titles, and business address of the president, secretary, and treasurer, and the seal of the corporation shall be affixed and attested by the secretary.

The proposal shall be issued to a prequalified bidder in the same name and style as the financial statement used for prequalification and shall be submitted in like manner.

1-08 REJECTION OF PROPOSALS{ TC "1-08 REJECTION OF PROPOSALS" \f C \l "1" }. The Department reserves the right to reject proposals for any of the conditions in Article 1-04 or for any of the following reasons:

- (a) More than one proposal for the same work from an individual, firm, partnership, or corporation under the same or different names.
- (b) Evidence of collusion among bidders.
- (c) Unbalanced proposals in which the prices for some items are obviously out of proportion to the prices for other items.
- (d) If the proposal does not contain a unit price for each pay item listed except in the case of authorized alternate pay items or lump sum pay items.
- (e) If the proposal is other than that furnished by the Department; or if the form is altered or any part thereof is detached.
- (f) If there are omissions, erasures, alterations, unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
- (g) If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- (h) If the proposal is not accompanied by the proper proposal guaranty.
- (i) If the proposal is prepared with other than ink or typewriter.
- (j) If the proposal is submitted in any other name other than that to whom it was issued by the Department.

1-09 PROPOSAL GUARANTY{ TC "1-09 PROPOSAL GUARANTY" \f C \l "1" }. Each Proposal shall be accompanied by either a bid bond on the Department of Transportation, Division of Aeronautics form contained in the proposal, executed by a corporate surety company satisfactory to the Department or by a bank cashier's check or a properly certified check for not less than 5 percent of the amount bid.

Bank cashier's checks, or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois.

1-10 DELIVERY OF PROPOSALS{ TC "1-10 DELIVERY OF PROPOSALS" \f C \l "1" }. Each proposal should be submitted in a special envelope furnished by the Department. The blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Department is used, it shall be of the same general size and shape and be similarly marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Department at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and place specified in the Notice to Bidders. Proposals received after the time for opening of bids will be returned to the bidder unopened.

1-11 WITHDRAWAL OF PROPOSALS{ TC "1-11 WITHDRAWAL OF PROPOSALS" \f C \l "1" }. Permission will be given a bidder to withdraw a proposal if he makes his request in writing or by telegram before the time for opening proposals. If a proposal is withdrawn, the bidder will not be permitted to resubmit this proposal at the same letting. With the approval of the Engineer, a bidder may withdraw a proposal and substitute a new proposal prior to the time of opening bids.

1-12 PUBLIC OPENING OF PROPOSALS{ TC "1-12 PUBLIC OPENING OF PROPOSALS" \f C \l "1" }. Proposals will be opened and read publicly at the time and place specified in the Notice to Bidders. Bidders, their authorized agents, and other interested parties are invited to be present.

1-13 DISQUALIFICATION OF BIDDERS{ TC "1-13 DISQUALIFICATION OF BIDDERS" \f C \l "1" }. A bidder shall be considered disqualified for any of the following reasons:

- (a) Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.
- (b) Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner.
- (c) If the bidder is considered to be in "default" for any reason specified in the Subsection 1-04 titled ISSUANCE OF PROPOSAL FORMS of this section.

1-14 WORKER'S COMPENSATION INSURANCE{ TC "1-14 WORKER'S COMPENSATION INSURANCE" \f C \l "1" }. Prior to the approval of his contract by the Division, the Contractor shall furnish to the Division certificates of insurance covering Worker's Compensation, or satisfactory evidence that this liability is otherwise taken care of in accordance with Section 4.(a) of the "Worker's Compensation Act of the State of Illinois" as amended.

## SECTION 2

### AWARD AND EXECUTION OF CONTRACT

2-01 CONSIDERATION OF PROPOSALS{ TC "2-01 CONSIDERATION OF PROPOSALS" \f C \l "1" }. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. In the event of a discrepancy between unit bid prices and extensions, the unit bid price shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

- (a) If the proposal is irregular as specified in the subsection titled REJECTION OF PROPOSALS of Section 1.
- (b) If the bidder is disqualified for any of the reasons specified in the subsection titled DISQUALIFICATION OF BIDDERS of Section 1.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals; waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable State and Local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise.

2-02 AWARD OF CONTRACT{ TC "2-02 AWARD OF CONTRACT" \f C \l "1" }. The award of contract will be made within 60 calendar days after the opening of proposals to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by letter, that his bid has been accepted, and that he has been awarded the contract.

If a contract is not awarded within 60 days after the opening of proposals, a bidder may file a written request with the Division for the withdrawal of his bid and the Division will permit such withdrawal.

For Federally assisted contracts, unless otherwise specified in this subsection, no award shall be made until the Division has concurred in the Owner's recommendation to make such award and has approved the Owner's proposal contract to the extent that such concurrence and approval are required by Federal Regulations.

2-03 CANCELLATION OF AWARD{ TC "2-03 CANCELLATION OF AWARD" \f C \l "1" }. The Division reserves the right to cancel the award without liability to the bidder at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with the subsection titled APPROVAL OF CONTRACT of this section. The Division at the time of cancellation will return the proposal guaranty.

2-04 RETURN OF PROPOSAL GUARANTY{ TC "2-04 RETURN OF PROPOSAL GUARANTY" \f C \l "1" }. The proposal guaranties of all except the two lowest bidders will be returned promptly after the proposals have been checked, tabulated, and the relation of the proposals established. Proposal guaranties of the two lowest bidders will be returned as soon as the Construction Contract, Performance Bonds, and Payment Bonds of the successful bidder have been properly executed and approved.

If any other form of proposal guaranty is used, other than a bid bond, a bid bond may be substituted at the Contractor's option.

2-05 REQUIREMENT OF PERFORMANCE AND PAYMENT BONDS{ TC "2-05 REQUIREMENT OF PERFORMANCE AND PAYMENT BONDS" \f C \l "1" }. The successful bidder for a contract, at the time of the execution of the contract, shall deposit with the Division separate performance and payment bonds each for the full amount of the contract. The form of the bonds shall be that furnished by the Division, and the sureties shall be acceptable to the Division.

2-06 EXECUTION OF CONTRACT{ TC "2-06 EXECUTION OF CONTRACT" \f C \l "1" }. The successful bidder shall sign (execute) the Contract and shall return the signed Contract to the Owner (Sponsor) for signature (execution) and subsequently return all copies to the Division. The fully executed surety bonds specified in the subsection title REQUIREMENTS OF PERFORMANCE AND PAYMENT BONDS of this section will be forwarded to the Division within 15 days of the date mailed or otherwise delivered to the successful bidder. If the Contract and Bonds are mailed, special handling is recommended.

If the bidder to whom award is to be made is a corporation organized under the laws of a State other than Illinois, the bidder shall furnish the Division a copy of the corporation's certificate of authority to do business in the State of Illinois, or provide evidence of the same, with the return of the executed contract and bond. Failure to furnish such evidence of a certificate of authority within the time required will be considered as just cause for the annulment of the award and the forfeiture of the proposal guaranty to the State, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

2-07 APPROVAL OF CONTRACT{ TC "2-07 APPROVAL OF CONTRACT" \f C \l "1" }. Upon receipt of the contract and bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in

accordance with local laws or ordinances, and return the contract to the Division for approval and execution by the Division. Delivery of the fully executed contract to the Contractor shall constitute the Department's approval to be bound by the successful bidder's proposal and the terms of the contract.

2-08 FAILURE TO EXECUTE CONTRACT{ TC "2-08 FAILURE TO EXECUTE CONTRACT" \f C \l "1" }. If the contract is not executed by the Division within 15 days following receipt from the bidder of the properly executed contracts and bonds, the bidder shall have the right to withdraw his bid without penalty.

Failure of the successful bidder to execute the contract and file acceptable bonds within 15 days after the contract has been mailed to him shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty which shall become the property of the State, not as a penalty, but as liquidation of damages sustained.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS

The requirements of the following provisions written for Federally-assisted construction contracts, including all goals and timetables and affirmative action steps, shall also apply to all State-funded construction contracts awarded by the Illinois Department of Transportation.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

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:

APPENDIX A

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

AREA COVERED (STATEWIDE)

Goals for Women apply nationwide.

GOAL

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

APPENDIX B

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

<u>Economic Area</u>	<u>Goal (percent)</u>
056 Paducah, KY:	
Non-SMSA Counties -	5.2
IL - Hardin, Massac, Pope	
KY - Ballard, Caldwell, Calloway, Carlisle, Crittenden,	
Fulton, Graves, Hickman, Livingston, Lyon, McCracken, Marshall	
080 Evansville, IN:	
Non-SMSA Counties -	3.5
IL - Edwards, Gallatin, Hamilton, Lawrence, Saline, Wabash, White	
IN - Dubois, Knox, Perry, Pike, Spencer	
KY - Hancock, Hopkins, McLean, Mublenberg, Ohio, Union, Webster	

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<u>Economic Area</u>	<u>Goal (percent)</u>
081 Terre Haute, IN:	
Non-SMSA Counties -	2.5
IL - Clark, Crawford	
IN - Parke	
083 Chicago, IL:	
SMSA Counties:	19.6
1600 Chicago, IL -	
IL - Cook, DuPage, Kane, Lake, McHenry, Will	
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 - Mendard, 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	



APPENDIX B (CONTINUED)

<u>Economic Area</u>	<u>Goal (percent)</u>
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 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 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 provisions and specifications set forth in its federally assisted contracts, and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. 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 Illinois Division of Aeronautics will provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction contract and/or subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. This notification will list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the entire State of Illinois for the goal set forth in APPENDIX A and the county or counties in which the work is located for the goals set forth in APPENDIX B.

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STANDARD FEDERAL EQUAL EMPLOYMENT  
OPPORTUNITY CONSTRUCTION CONTRACT  
SPECIFICATIONS (EXECUTIVE ORDER 11246)

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, United States 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:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) 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
    - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000. the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors 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 p 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 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 toward 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.

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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 on-site 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 as 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 Contractors 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 agreements; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
  - g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foreman, 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.

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- j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
  - k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
  - l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
  - m) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
  - n) Ensure that all facilities and company activities are 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 supervisors' 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 p). 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 p 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 specified minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

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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 his 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).

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ANNUAL EEO-1 REPORT TO JOINT REPORTING COMMITTEE AS REQUIRED AT

41 CFR 60-1.7(a)

Any Contractor having a Federal contract of \$50,000 or more and 50 or more employees is required to file annual compliance reports on Standard Form 100 (EEO-1) with the Joint Reporting Committee in accordance with the instructions provided with the form. The Contractor will provide a copy of such a report to the contracting agency within 30 days after the award of a contract.

The Contractor shall require its subcontractors to file an SF 100 within 30 days after award of the subcontract if (1) it is not exempt from the provisions of these regulations in accordance with 60-1.5, (2) has 50 or more employees, (3) first tier subcontractor, and (4) has a subcontract amounting to \$50,000 or more.

Subcontractors below the first tier which perform construction work at the site of construction shall be required to file such a report if (1) it is not exempt from the provisions of these regulations in accordance with 60-1.5, (2) has 50 or more employees and has a subcontract amounting to \$50,000 or more.

The SF 100 is available at the following address:

Joint Reports Committee  
EEOC - Survey Division  
1801 "L" Street N.W.  
Washington, D.C. 20750

Phone (202) 663-4968

## DISADVANTAGED BUSINESS POLICY

### I. NOTICE

This proposal contains the special provision entitled "Required 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."

### II. 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.

### III. 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.

### IV. 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).

### V. 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.

(Rev. 9/21/92)



State of Illinois  
Department of Transportation

SPECIAL PROVISION  
FOR  
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION  
Effective: September 1, 2000  
Revised: January 1, 2010

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

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

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

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

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

**CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR:** This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform **18.0%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

**DBE LOCATOR REFERENCES:** Bidders may consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at [www.dot.il.gov](http://www.dot.il.gov).

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

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The name and address of DBE firms that will participate in the contract;
  - (2) A description, including pay item numbers, of the work each DBE will perform;
  - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
  - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
  - (6) If the contract goal is not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURE. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document the good faith efforts of the bidder before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan commits sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR part 26, Appendix A.

The Utilization Plan will not be approved by the Department if the Utilization Plan does not commit sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into

economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.  
b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable.

Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
  - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
  - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision and that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons why good faith efforts have not been found.
  - (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the original DBE, to the extent needed to meet the contract goal.
- (c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.
- (d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate

method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
- (f) If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (g) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (h) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (j) of this part.
- (i) 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.
- (j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

Certification of Nonsegregated Facilities - as Required by 41 CFR 60-1.8

(Applicable to (1) contracts, (2) subcontracts, and (3) agreements with applicants who are themselves performing federally assisted construction contracts, exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause).

By the submission of this bid, the bidder, offeror, applicant, or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments and that that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The bidder, offeror, applicant, or subcontractor agrees that a breach of his certification is a violation of the Equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" 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 which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR  
CERTIFICATIONS OF NONSEGREGATED FACILITIES**

A certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding \$10,000.00 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C 1001.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS  
Instructions for Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction" "debarred" "suspended" "ineligible" "lower tier covered transaction" "participant" "person" "primary covered transaction" "principal" "proposal" and "voluntarily excluded" as used in this clause have the meaning set out in the Definitions and Coverage sections of the rules implementing Executive Order 12540. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Transaction", provided by the department or agency entering into this covered transaction without modification in all lower covered transactions and in all solicitations for lower covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to check the Nonprocurement List (Tel. #).
9. 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 clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 8 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and  
Other Responsibility Matters - Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief that it and its principals:
  - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by an Federal department or agency;
  - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or Local) transaction or contract under a public transaction: violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction or destruction of records, making false statements, or receiving stolen property;
  - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - d. Have not within a three-period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

CERTIFICATION REGARDING LOBBYING (Applicable to contracts in excess of \$100,000):

Certification for Contracts, Grants, Loans and Cooperative Agreements.

The undersigned bidder certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have paid or will be paid, by or behalf of the undersigned, 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 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 subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients 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.



## WORKERS' COMPENSATION INSURANCE

Prior to the execution of his construction contract by the Illinois Department of Transportation, Division of Aeronautics, hereinafter referred to as "Division", the Contractor shall furnish to the Division certificates of insurance covering Workers' Compensation, or satisfactory evidence that this liability is otherwise taken care of in accordance with Section 4.(a) of the "Workers' Compensation Act of the State of Illinois" as amended.

Such insurance, or other means of protection as herein provided, shall be kept in force until all work to be performed under the terms of the contract has been completed and accepted in accordance with the specifications, and it is hereby understood and agreed that the maintenance of such insurance or other protection, until acceptance of the work by the Division is a part of the contract. Failure to maintain such insurance, cancellation by the Industrial Commission of its approval of such other means of protection as might have been elected, or any other act which results in lack of protection under the said "Workers' Compensation Act" may be considered as a breach of the contract.

### SPECIAL PROVISION FOR DOMESTIC SOURCE FOR STEEL

Control of Materials: All steel products, as defined by the Illinois Steel Products Procurement Act, incorporated into this project shall be manufactured or produced in the United States and, in addition, shall be domestically fabricated. The Contractor shall obtain from the steel producer and/or fabricator, in addition to the mill analysis, a certification that all steel products meet these domestic source requirements.

CLAUSE TO BE INCLUDED IN ALL SOLICITATIONS,  
CONTRACTS, AND SUBCONTRACTS RESULTING FROM PROJECTS FUNDED UNDER THE AIP

The Contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- a. is not owned or controlled by one or more citizens or nationals of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- b. has not knowingly entered into any contract or subcontract for this project with a Contractor that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list.
- c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

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 a Contractor or subcontractor who is unable to certify to the above. If the Contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on the said list for use on the project, the Federal Aviation Administration may direct, through the sponsor, cancellation of the contract at no cost to the Government.

Further, the Contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The Contractor may rely upon the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The Contractor shall provide immediate written notice to the sponsor if the Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide immediate written notice to the Contractor, if at any time it learns that its certification was erroneous by reason of changed circumstances.

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

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.

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

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY  
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

**NOTICE**

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <http://www.dot.state.il.us/desenv/delett.html>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <http://www.dot.state.il.us/desenv/subsc.html>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.

SECTION III

Special Provisions

For

Mike Apron Expansion – Contract 1

ILL. PROJ. BLV-4061

AIP PROJ. 3-17-0146-XX

CMT No. 10098-01

At

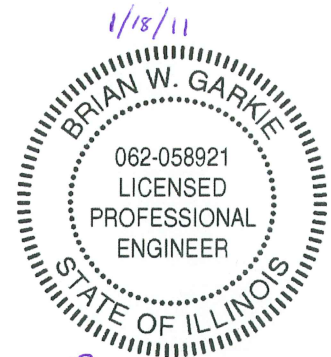


January 14, 2011

Prepared By:



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*Brian W. Garkie*  
*Exp. 11/30/11*

**GENERAL**

These Special Provisions, together with applicable Standard Specifications, Contract Requirements for Airport Improvement Projects, Rules and Regulations, 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, Division of Aeronautics, and the representatives of St. Clair County, Illinois for the improvements at the MidAmerica St. Louis Airport.

At the preconstruction conference, the Contractor shall submit to the Resident Engineer a detailed schedule indicating when the various shop drawings required by the contract will be submitted to the Resident Engineer. This schedule shall be developed so as to permit the Resident Engineer to review the shop drawings in an orderly manner. If shop drawings for several items are submitted at the same time, the Contractor will inform the Resident Engineer on the priority of the reviews.

**GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS**

The “**Standard Specifications for Construction of Airports (Consolidated Reprint)**”, dated November 2, 2009, State of Illinois Department of Transportation, Division of Aeronautics shall govern the project except as otherwise noted in these Special Provisions. In the cases of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern. As noted within the Special Provisions, the Illinois Department of Transportation “Standard Specifications for Road and Bridge Construction”, Adopted January 1, 2007, shall also apply.

The Standard Specifications can be obtained from the Illinois Department of Transportation, Division of Aeronautics website at <http://dot.state.il.us/aero/airspecs.html> or from the Division.

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## **DIVISION I - GENERAL PROVISIONS**

### **SECTION 10 – DEFINITION OF TERMS**

10-23 **ENGINEER**

DELETE: Paragraph (b).

### **SECTION 20 – SCOPE OF WORK**

20-05 **MAINTENANCE OF TRAFFIC**

ADD: 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.

20-09 **AIRPORT OPERATIONS DURING CONSTRUCTION**

ADD:

a. Construction Activity and Aircraft Movements

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

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

b. Limitations On Construction

(1) Open flame welding or torch cutting operations shall be prohibited, unless adequate fire and safety precautions are provided.

(2) Open trenches, excavations and stockpiled material near any pavements shall be prominently marked with red flags and lighted by light units during hours of restricted visibility and/or darkness.

(3) Stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions.

(4) The use of explosives shall be prohibited.

(5) Burning shall not be allowed.

c. Debris

Waste and loose material capable of causing damage to aircraft landing gears, propellers, or being ingested in jet engines shall not be placed on active aircraft movement areas. Material tracked on these areas shall be removed continuously during



the work project. The Contractor shall provide garbage cans in employee parking areas and storage areas for debris and shall empty the garbage cans as needed.

### **SECTION 30 – CONTROL OF WORK**

#### 30-06 CONSTRUCTION LAYOUT STAKES

##### RESPONSIBILITY OF THE RESIDENT ENGINEER

DELETE: Paragraphs A and B of the Standard Specifications and replace with:

- A. The Resident Engineer will locate and reference four (4) control points within the limits of the project.
- B. A benchmark has been established along the project outside of construction lines.

ADD: As paragraph M:

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

##### RESPONSIBILITY OF THE CONTRACTOR

ADD:

- H. The Contractor shall immediately notify the Resident Engineer of conflicts or discrepancies with the established control points.
- I. Construction layout shall not be paid for separately, but shall be considered incidental to the pay item for which the layout is required.
- J. The Contractor shall survey all utilities and structure invert elevations installed by the Contractor to obtain both vertical and horizontal locations of the installed utilities prior to covering up each utility. This includes but is not limited to storm sewer pipe, underdrains, sanitary pipe, electrical conduit and duct banks, manhole, inlet, cleanouts, and collection structure invert elevations, and any other utility or structure installed by the Contractor. **This information shall be provided to the Engineer prior to payment for each work item.** This survey work shall be considered incidental to the respective work item.

#### 30-12 LOAD RESTRICTIONS

REVISE the fourth paragraph to read:

Access to the construction work area is limited to the haul routes as shown on the construction activity plan drawings. The use of existing airfield pavements by contractor construction traffic including all haul trucks is prohibited unless previously approved by the Director of Engineering and Planning. Any damage to existing airport pavement due to construction traffic operating beyond the approved work limits, hauling outside of the approved haul/access routes and construction traffic operating in prohibited areas shall be repaired by the Contractor at his own expense to the satisfaction of the owner.

**ADD: Any damage to existing airfield pavements or public roads caused by the Contractor's operations shall be repaired or replaced by the Contractor at his own expense to the satisfaction of the Owner.**

30-13 MAINTENANCE DURING CONSTRUCTION

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

30-16 FINAL INSPECTION

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

30-18 PLANS AND WORK DRAWINGS

DELETE:

References to "approval" in first paragraph and replace with "review".

REVISE the fourth paragraph to read:

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

REVISE the eighth paragraph to read:

The Contractor shall submit at least four (4) copies of each drawing to be reviewed, of which two (2) copies will be retained by the Project Engineer for his/her use and records. Two (2) copies of each drawing will be returned to the Contractor.

REVISE the last paragraph to read:

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

**PROJECT LOCATION: MidAmerica St. Louis Airport**

**PROJECT TITLE: Mike Apron Expansion – Contract 1**

**PROJECT NUMBERS: Illinois Project: BLV-4061 / AIP Project: 3-17-0146-XX**

**CONTRACT ITEM: (Pay Item Number & Name)**

**SUBMITTED BY: (Contractor/Subcontractor Name)**

**DATE: (Date of Submittal)**

## **SECTION 40 – CONTROL OF MATERIALS**

### **40-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS**

ADD: To the end of the second paragraph:

The statements regarding the origin, composition, and manufacture for each material to be used in the work shall also include a statement that the Buy American (Title 49 U.S.C. §50101) requirements of the contract are either met or that a waiver has been granted.

Only FAA approved manufacturers meeting the Buy American preference requirements can provide the FAA approved equipment and materials specified in this document. The manufacturer shall certify in writing, all products are wholly produced in the US of US materials, or Request a waiver to use non-US produced products, or Certify that all equipment that is being used on the project is on the National Buy American conformance list.

The waiver can be considered if “at least 60% of the cost of the components and subcomponents in the facility or equipment are produced in the United States and the final assembly of the facility or equipment has occurred in the United States.

In any calculation of Buy American percentage, the labor for the final assembly is excluded. This is because the Buy American statute is based on the cost of materials and equipment, not labor. For a building, this means that only the cost of the materials as they are delivered to the airport site are considered when calculating US and non-US component and subcomponent costs. For equipment, the costs of the final assembly at the manufacturing site are excluded.

The Contractor must request waivers from FAA in writing, with sufficient supporting information. The Contractor is solely responsible for ensuring their waiver request is complete and accurate using project specific information provided directly by the Contractor or the Contractor’s supplier.

The FAA will conduct its review and approval based on the information provided by the grant recipient. The information that must be provided for equipment shall include but not be limited to:

- Project Number
- Project Name
- Airport Name
- Total Project Cost
- Total Equipment of Bid Item Cost for which the waiver is being requested
- Total Equipment or Bid Item Cost excluding labor for final assembly
- The equipment of bid item for which the waiver is being requested
- The manufacturer and country of origin of the equipment or bid item
- The location of final assembly of the equipment or bid item (not the airport site)
- The cost of the US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The cost of the non-US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The resulting percent of US and non-US components

The Contractor/manufacturer is urged to submit waiver requests as early as possible.

ADD: After the last paragraph:

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

**If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 30-18, 40-01, 40-03 and 40-11 of the Standard and Special Provisions, the pay item shall not included on the Construction Progress Payment report until such submittals have been furnished.**

40-11 CERTIFICATION OF MATERIALS

ADD:

The Contractor shall certify all materials incorporated into the contract. Certification documentation shall be submitted to the Resident Engineer. It shall be the **sole** responsibility of the Contractor to ensure the submittal of adequate and accurate documentation in order to satisfy the contract material certification requirements **prior** to the delivery of the materials. Materials without certification or those with certification that demonstrates the materials do not meet the requirements of the plans and specifications shall be considered nonconforming and subject to the provisions of Section 30-02.

**The certifications shall be submitted as a part of the shop drawing submittal.**

As a guide to the certification process and requirements, the Contractor shall use the Illinois Department of Transportation/Division of Aeronautics MANUAL FOR DOCUMENTATION OF AIRPORT MATERIALS dated April 1, 2010 or latest edition including any addendums. Copies of this manual are available by contacting Mr. Mike Wilhelm-Division of Aeronautics at (217) 785-4282 or from their website at <http://dot.state.il.us/aero/aviamanual.html>.

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

All submittals shall contain the following information:

<b>PROJECT LOCATION:</b>	MidAmerica St. Louis Airport
<b>PROJECT TITLE:</b>	Mike Apron Expansion – Contract 1
<b>PROJECT NUMBERS:</b>	Illinois Project: BLV-4061 AIP Project: 3-17-0146-XX
<b>CONTRACT ITEM:</b>	(i.e., AR751410 - Inlet)
<b>SUBMITTED BY:</b>	(Contractor/Subcontractor Name)
<b>DATE:</b>	(Date of Submittal)

**SECTION 50 – LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC**

50-10 BARRICADES, WARNING SIGNS & HAZARD MARKINGS

ADD after the first paragraph:

When low profile barricades are required, the Airport will provide to the Contractor for use during the project up to fifty (50) low profile barricades. Any additional barricades required

shall be furnished by the Contractor at no additional cost to the contract. See the general phasing notes on the Construction Activity Plan sheet for additional information.

ADD after the last paragraph:

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

Contractor identification shall be displayed on both sides of all contractor vehicles by labeling painted on the vehicles or by magnetically attached signs.

50-17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS

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

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

**It shall be the Contractor's responsibility to locate and protect all FAA and airport-owned utilities within the construction limits. The FAA and Airport will not be required to locate utilities for the Contractor.** This includes all electrical cables, storm sewer, drain tile, sanitary sewer and water main.

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

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

**MIDAMERICA ST. LOUIS AIRPORT**

<u>Utility Service or Facility</u>	<u>Contact (Person)</u>	<u>Contact (Phone)</u>
FAA Control and Communication Cables	FAA Sector Office	(618) 256-1800
Airport Lighting	JULIE	(800) 892-0123
Fire Water Line	JULIE	(800) 892-0123
Electrical Cables	JULIE	(800) 892-0123
Gas Lines	JULIE	(800) 892-0123
Telephone Cables	JULIE	(800) 892-0123

## **SECTION 60 – PROSECUTION AND PROGRESS**

### 60-05 LIMITATIONS OF OPERATIONS

ADD: The Contractor shall not have access to any part of the active airfield (runways or taxiways) for any equipment or personnel without approval of the Director of Engineering and Planning.

### 60-13 CONTRACTOR'S ACCESS TO AIRFIELD

ADD: The requirements below shall be necessary when access within the security fence is required for construction.

- A. Certain Contractor employees shall obtain a MidAmerica St. Louis Airport Access Media Identification Badge. This consists of filling out all necessary paperwork, fingerprinting, attending and passing a 2-hour training class concerning safety and security at the Airport. Contractor employees must meet certain background check criteria and the contractor must make certain certification about each employee. The contractor shall be responsible for fingerprinting costs (currently \$75.00 per individual).
- B. All Contractor employees who are designated as drivers for the contractor within the airfield operations area (AOA) shall also attend and pass the MidAmerica St. Louis Airport Drivers Training Program. The duration is approximately two hours. Only those individuals who receive this designation will be permitted to operate vehicles or equipment on MidAmerica St. Louis Airport (BLV).
- C. The contractor will be responsible for all fees and costs associated with fingerprinting, issue of ID badges, and required security and/or driver training for each applicant.
- D. The Contractor shall submit a list of subcontractors a minimum of 10 days prior to the preconstruction meeting. Each subcontractor shall have the same badging requirements as the prime contractor.
- E. The Contractor is responsible for payment of Transportation Security Administration (TSA) fines and penalties resulting from security infractions perpetrated by, caused by, or permitted by his personnel or work forces of his subcontractors or suppliers.
- F. Contractor work crews must maintain radio contact with the air traffic control tower at all times. MidAmerica St. Louis Airport shall supply the Contractor with appropriate radio(s).
- G. The Contractor shall be responsible for keeping all dirt, mud, and debris off the paved surfaces of the airfield operations area (AOA). If any dirt, mud or debris from the Contractor's activities comes into contact with a paved surface in the AOA, the Contractor shall take immediate action to remove the items and thoroughly clean the surface to the satisfaction of the Resident Engineer or Airport maintenance/public safety personnel.
- H. No materials or equipment shall be stored within the AOA. At the end of each work day, all unused material and equipment will be moved to a designated area on the airport.
- I. The Contractor will have the option of providing portable bathroom facilities inside the AOA or leaving the AOA to use the public facilities in the passenger terminal. Use of the public facilities in the passenger terminal will require the contractor to exit the AOA at the approved gate location as shown on the plans.

- J. The Contractor may have free access to water from a potable water hydrant from the Airport's system provided the Contractor installs a meter to allow the Airport a credit in the sewer bill. Any costs due to providing and installing a meter shall be borne by the Contractor.
- K. The storage and staging area will be across from the engineering and planning building. This area is enclosed by a fence and is outside the AOA fence. An alternate location will be southeast (south) of the fuel farm on the east side of the public access road. This area is outside of the AOA fence and has no fencing around it.

### **SECTION 70 – MEASUREMENT AND PAYMENT**

#### 70-05 **PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK**

ADD the following to subsection B.7. Statements:

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

## **DIVISION II – PAVING CONSTRUCTION DETAILS**

### **ITEM 150510 – ENGINEER’S FIELD OFFICE**

#### **150-2.1**

REVISE:

Paragraph (G) to the following:

- (G) One (1) electric water cooler dispenser (countertop or freestanding) capable of dispensing cold and hot water and a supply of water bottles filled with potable water as needed.

Paragraph (I) to the following:

- (I) One (1) desk top laser copier/printer, minimum 25 copies per minute, complete with paper and toner, dry process, capable of copying 8 ½” x 11” and 11” x 17” sheets of paper and capable of copying field books, paper shall be supplied as needed throughout project.

ADD:

- (N) One first-aid cabinet fully equipped.
- (O) One (1) 800 Watt minimum, 0.8 cubic foot or larger microwave oven.
- (P) One (1) Coffee Maker
- (Q) 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.
- (R) 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.

#### **150-3.1**

REVISE the 1<sup>st</sup> sentence to read as follows:

The building will include all utility costs including any hookup and disconnection costs and the building and any supplied equipment and furniture shall be released to the Contractor in good condition at the end of the project.

ADD: Payment will be made under:

**ITEM AR150510            ENGINEER’S FIELD OFFICE – PER LUMP SUM.**



**ITEM 150520 – MOBILIZATION**

**150-3.1**

ADD: Payment will be made under:

**ITEM AR150520      MOBILIZATION – PER LUMP SUM.**

## **ITEM 152000 – EXCAVATION AND EMBANKMENT**

### **DESCRIPTION**

#### **152-1.1**

ADD to the end of the 3<sup>rd</sup> paragraph the following:

Excess excavation shall be transported to the on airport location shown on the plans. Any material hauled on public roads shall be hauled in licensed trucks. Any St. Clair County permits required by the Contractor for hauling shall be obtained by the Contractor at no additional cost to the contract.

### **CONSTRUCTION METHODS**

#### **152-2.2 EXCAVATION**

REVISE: The 8<sup>th</sup> paragraph of this section to read:

Excavation and embankment below airfield pavements shall be compacted to a density of not less than the percentage of the maximum density, at optimum moisture, shown in Table 1 as determined by the compaction control tests cited in Division VII for ASTM D 1557.

#### **152-2.15 DUST CONTROL WATERING**

ADD:

This work shall consist exclusively of the control 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.

Dust control watering shall not be paid for separately, but shall be considered incidental to the contract.

### **MEATHOD OF MEASUREMENT**

#### **152-3.2**

DELETE: This section.

#### **152-3.3**

DELETE: This section.

### **BASIS OF PAYMENT**

#### **152-4.3**

DELETE: This section.

#### **152-4.4**

DELETE: This section.

Payment will be made under:

**ITEM AR152410 UNCLASSIFIED EXCAVATION – PER CUBIC YARD.**

**ITEM 155 – LIME TREATED SUBGRADE**

**COMPOSITION**

**155-3.1 LIME**

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

The optimum moisture content and maximum dry density of the lime-modified soil shall be determined by the Contractor in accordance with ASTM D 1557.

**BASIS OF PAYMENT**

**155-8.1**

ADD:

Payment will be made under:

**ITEM AR155540  
ITEM AR155612**

**BY-PRODUCT LIME – PER TON  
SOIL PROCESSING-12” – PER SQUARE YARD**

**ITEM 156000 – EROSION CONTROL**

**MATERIALS**

ADD:

**156-2.6 EROSION CONTROL BLANKET**

Erosion control blanket shall be a photodegradable net meeting the requirements of North American Green DS75, Western Excelsior EXCEL R-1 Rapid Go, Curlex I QuickMow or equal.

**CONSTRUCTION METHODS**

ADD:

**156-3.9 EROSION CONTROL BLANKET**

The construction methods, including overlap and staple patterns, shall follow the manufacturer's recommendations.

ADD:

**156-3.10 INLET PROTECTION**

Existing inlets located within the disturbed area and new in-turf inlets shall be protected as detailed on the plans.

ADD:

**156-3.11**

In the event that temporary erosion and pollution control measures are ordered by the Engineer due to the Contractor's negligence or carelessness, the work shall be performed by the Contractor at no additional cost to the Owner.

**METHOD OF MEASUREMENT**

**156-4.2**

DELETE: This section to read:

**156-4.3**

REVISE: This section to read:

Temporary Seeding and Temporary Mulching shall not be measured for payment, but shall be considered incidental to Item 156000 – Erosion Control.

ADD:

**156-4.4**

The area of erosion control blanket to be paid for shall be the number of square yards satisfactorily installed by the Contractor and accepted by the Engineer.

ADD:

**156-4.5**

The number of Ditch Checks to be paid for shall be the number shown in the plans or ordered by the Resident Engineer used to control erosion and satisfactorily completed.

**BASIS OF PAYMENT**

**156-5.1**

REVISE: This section to read:

Payment will be made at the contract unit price per linear foot of Silt Fence, and at the contract unit price per each for Ditch Checks, and at the contract unit price per square yard for Erosion Control Blanket. This price shall be full compensation for furnishing all materials for all preparation and installation of these materials, including excavation, placement, tie-down stakes, staples, maintenance and removal and for all labor, equipment, tools, and incidentals necessary to complete this item.

Temporary seeding and temporary mulching shall not be measured for payment, but shall be considered incidental to Item 156000 – Erosion Control.

Payment will be made under:

<b>ITEM AR156510</b>	<b>SILT FENCE – PER LINEAR FOOT.</b>
<b>ITEM AR156511</b>	<b>DITCH CHECK – PER EACH.</b>
<b>ITEM AR156531</b>	<b>EROSION CONTROL BLANKET – PER SQUARE YARD.</b>

## **ITEM 209 – CRUSHED AGGREGATE BASE COURSE**

### **MATERIALS**

#### **209-2.1**

DELETE: Gradation “C” in Table 1.

### **CONSTRUCTION METHODS**

#### **209-3.4 FINISHING AND COMPACTING**

ADD:

The Contractor shall submit copies of all Quality Control density test results for each lift to the Resident Engineer prior to acceptance testing.

DELETE: Second sentence, third paragraph and REPLACE with:

When the rolling develops irregularities that exceed 3/8 inch when tested with a Contractor supplied 16 foot straightedge or other acceptable method, the irregular surface shall be loosened, refilled with the same kind of material as that used in constructing the course, and rolled again as required.

#### **209-3.7 SURFACE GRADE ACCURACY**

REPLACE the word “3/16” with “3/8”.

### **BASIS OF PAYMENT**

#### **209-5.1**

ADD:

Payment will be made under:

<b>ITEM AR209609</b>	<b>CRUSHED AGG. BASE COURSE- 9” – PER SQUARE YARD.</b>
<b>ITEM AR209611</b>	<b>CRUSHED AGGREGATE BASE COURSE- 11” – PER SQUARE YARD.</b>

**ITEM 302 – ASPHALT TREATED PERMEABLE SUBBASE**  
**(Central Plant Hot Mix)**

**BASIS OF PAYMENT**

**302-5.1**

ADD:

Payment will be made under:

<b>ITEM AR302611</b>	<b>ASPHALT TREATED PERMEABLE SUBBASE – PER SQUARE YARD.</b>
<b>ITEM AR302630</b>	<b>ATPS TEST SECTION – PER EACH.</b>



**ITEM 401 – BITUMINOUS SURFACE COURSE – METHOD I**  
**(Central Plant Hot Mix)**

**DESCRIPTION**

**401-1.1**

REVISE: The 3<sup>rd</sup> sentence of the 2<sup>nd</sup> paragraph to read:

The HMA surface course shall be laid in a maximum of 2 ½ inch lifts.

**401-3.2 JOB MIX FORMULA**

DELETE: In Table 1 the column labeled "Under 60,000 lb."

**CONSTRUCTION METHODS**

**401-4.12 JOINTS**

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

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

**401-4.14 SHAPING EDGES**

ADD the following as the 2<sup>nd</sup> paragraph of this section:

All pavement edges, including the pavement ends, must be left in proper alignment, as shown on the plans. This may be accomplished by a trimming method, or, at the Contractor's option, by sawing after the paving has been completed. No additional compensation will be made if the sawing method is used.

**BASIS OF PAYMENT**

**401-6.1**

ADD:

Payment will be made under:

**ITEM AR401610      BITUMINOUS SURFACE COURSE – PER TON**

## **ITEM 401650 – HMA PAVEMENT MILLING**

### **DESCRIPTION**

#### **401-1.1**

ADD:

This item shall include the removal of the underlying aggregate base course. Record drawings indicate the existing apron shoulder pavement to be 5 inches of bituminous concrete on 11 inches of crushed aggregate base course and the existing service road pavement to be 6 inches of bituminous concrete on 9 inches of crushed aggregate base course. 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.**

Unless otherwise approved by the Engineer, the bituminous concrete and crushed aggregate base course shall be placed in a stockpile on the airport property.

### **CONSTRUCTION METHODS**

#### **401-3.1**

DELETE this section.

ADD:

The Contractor shall remove the pavement full depth to the limits shown in the plans and as directed by the Resident Engineer. The bituminous concrete and aggregate base shall be mixed together during the milling operation. The material removed shall be stockpiled on airport property at a location to be determined by Airport Maintenance.

The existing pavement areas to be removed shall be done in such a manner as to prevent damage to the existing pavements. All edges adjacent to existing pavements shall be saw cut full depth prior to removal, as directed by the Resident Engineer.

### **METHOD OF MEASUREMENT**

#### **401-4.1**

DELETE this section.

ADD:

The yardage to be paid for shall be the number of square yards of full depth HMA pavement millings as measured in the field, completed and accepted. The removal of the crushed aggregate base course shall be considered incidental to the HMA pavement milling work.

### **BASIS OF PAYMENT**

#### **401-5.1**

ADD:

Payment will be made under:

**ITEM AR401650      BITUMINOUS PAVEMENT MILLING – PER SQUARE YARD.**

**ITEM 403 – BITUMINOUS BASE COURSE – METHOD I**  
**(Central Plant Hot Mix)**

**DESCRIPTION**

**403-1.1**

REVISE: The 3<sup>rd</sup> sentence of the 2<sup>nd</sup> paragraph to read:

The HMA base course shall be laid in a maximum of 2 ½ inch lifts.

**403-3.2 JOB MIX FORMULA**

DELETE: In Table 1 the column labeled “Under 60,000 lb.”.

**CONSTRUCTION METHODS**

**403-4.11 JOINTS**

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

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

**403-4.12 SHAPING EDGES**

ADD the following as the 2<sup>nd</sup> paragraph of this section:

All pavement edges, including the pavement ends, must be left in proper alignment, as shown on the plans. This may be accomplished by a trimming method, or, at the Contractor's option, by sawing after the paving has been completed. No additional compensation will be made if the sawing method is used.

**BASIS OF PAYMENT**

**403-6.1**

ADD:

Payment will be made under:

**ITEM AR403610      BITUMINOUS BASE COURSE – PER TON**

## **ITEM 501 – PORTLAND CEMENT CONCRETE PAVEMENT – METHOD II**

### **(PLAIN AND REINFORCED)**

#### **MATERIALS**

##### **501-2.4 PREMOLDED JOINT FILLER**

DELETE the 1<sup>st</sup> sentence and REPLACE with:

Premolded joint filler for expansion joints shall be a flexible foam expansion joint composed of isomeric polymers in a very small, closed cell structure and shall meet the requirements of ASTM D-1752, Sections 5.1 through 5.4, with the compression requirement modified to 10 psi (7.03 g/mm<sup>2</sup>) minimum and 25 psi (17.58 g/mm<sup>2</sup>) maximum. Expansion joint filler shall be Ceramar by W.R. Meadows, or approved equivalent.

##### **501-2.6 STEEL REINFORCEMENT**

DELETE: This Section.

ADD:

Reinforcement bars required at fillets and structures shall be deformed steel bar Grade 40 or 60 conforming to ASTM A-615 or ASTM A-616. Reinforcement bars designated as ASTM A-615 can be used for construction requiring bent bars. Reinforcement bars designated as ASTM A-616 can only be used if they are straight. Reinforcement bars shall be epoxy coated according to AASHTO M 284 and the epoxy coating shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.

Reinforcement of odd-shaped panels, if required by the Engineer in the field, shall be panels of welded wire fabric of the size and dimensions shown in the plans conforming to ASTM A-185.

##### **501-2.7 DOWEL AND TIE BARS**

ADD:

All dowel bars shall be fastened firmly in position with an approved contraction joint dowel bar assembly prior to the start of paving operations or mechanically inserted per article 420.05 of the IDOT Standard Specifications for Road and Bridge Construction. Loose dowel bars will not be accepted.

**Contraction Joint Assembly.** The contraction joint assembly shall be an approved welded assembly possessing the rigidity to hold the dowels during the placing and compacting of the concrete to the degree of alignment specified hereinafter. The assembly shall have 4 parallel spacer bars and 2 subgrade-bearing members. An upright support at each end of dowel shall be welded to both the outside spacer bar and the bearing member at appropriate points to hold the dowels at the design height. The two inside spacer bars shall be spaced approximately 2 inches on each side of center.

The dowels shall be spaced as shown on the plans and alternate ends shall be welded to the outside spacer bars. One weld is permitted per bar. The end of each dowel not welded to a spacer bar shall be securely held in place by means of wire loops or metal tubes welded to the other outside spacer bar. Suitable ties shall be provided to hold the assembly in normal position during shipping, handling and installation. Wire sized shall not be less than W7 for the outside spacer bars, bearing members and upright supports and W5 wire for the 2 inside spacer bars. The tie wires used for securing the spacer bars shall not be less than W3 wires.

The assembly shall be provided with 2 continuous bearing plates of not less than 2-inch width and not less than 0.0359 inches thickness sheet steel. The bearing plates shall be attached by welding to the subgrade members or by suitable clips and shall be punched to receive the protruding ends of the upright supports and stakes. The stakes shall be driven parallel to and next to the upright supports. The subgrade bearing members may be omitted if suitable subgrade plates are shop welded to the assembly and provide equivalent rigidity. Bearing plates will not be required on stabilized subbase.

The welds in the assembly shall be securely made. A broken weld will be sufficient cause for rejection of the length or section of the assembly in which it occurs.

#### **501-2.9 COVER MATERIAL FOR CURING**

DELETE: (b), (c) and (d).

REVISE: (a) as follows:

Curing materials shall be liquid membrane-forming compounds conforming to the requirements of ASTM C-309, Type 2 (White Pigmented).

#### **501-2.11 CHEMICAL ADHESIVES**

ADD:

Non-shrink grout will not be allowed as a material used to anchor dowel bars to hardened concrete.

### **CONSTRUCTION METHODS**

#### **501-3.1 EQUIPMENT**

##### **501-3.1(E) FORMS**

ADD:

All radii and tapers shall be formed with flexible forms.

#### **501-3.2 FORM SETTING**

ADD:

In the event that the pavement is constructed utilizing the formed paving technique, the paving lane forms supported by the subbase shall be anchored by steel pins. No formed areas shall be poured until the Engineer has checked and accepted the formwork for both alignment and elevation.

#### **501-3.3 CONDITIONING OF UNDERLYING COURSE, SLIP-FORM CONSTRUCTION**

DELETE: The first sentence.

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.

During placement of the concrete pavement, the subbase shall be maintained in a moist condition without accumulation of pools of water.

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

#### **501-3.4 CONDITIONING OF UNDERLYING COURSE, SIDE-FORM CONSTRUCTION**

ADD:

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

During placement of the concrete pavement, the subbase shall be maintained in a moist condition without accumulation of pools of water.

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

#### **501-3.6(A) PROPORTIONS**

DELETE: This section.

#### **501-3.7 FIELD TEST SPECIMENS**

ADD:

The Contractor shall provide a system of marking and tracking samples taken in the field. The system shall be provided at the Preconstruction conference and shall, at a minimum, provide location of sample, lot number and curing and reporting of all test specimens manufactured by the Contractor's personnel.

The Contractor shall provide the forms or molds used to make compressive test cylinders or flexural beam specimens.

#### **501-3.10 PLACING CONCRETE**

##### **A. Side-form Method**

ADD:

When concrete is to be placed adjoining a previously constructed lane of pavement and when mechanical equipment will be operated upon the existing lane of pavement, the concrete shall have a minimum flexural strength of 550 psi or compressive strength of 3500 psi. If only finishing equipment is carried on the existing lane, paving in adjoining lanes may be permitted after 3 days, if approved by the Engineer.

### **501-3.12 JOINTS**

ADD: To the end of the paragraph (B) Installation:

Protection of previously sawed 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.

### **501-3.14 SURFACE TEXTURE**

ADD:

The surface of the pavement shall be finished with a burlap drag or other approved method acceptable to the Engineer.

### **501-3.17 CURING**

A. **Impervious Membrane Method** shall be utilized for this project.

ADD:

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. Two (2) separate applications, applied at least five minutes apart, each at the rate of not less than 1 gallon per 250 square feet will be required upon surfaces and edges of the concrete. Another application shall be necessary to cover any deficient areas less than 1 gallon per 125 square feet. 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

ADD the following sections:

### **501-3.24 TEST SECTION FOR SLIP-FORM PAVERS**

Prior to paving using the slip-form paving method, an area of the new pavements designated by the Engineer shall be paved to develop and demonstrate satisfactory procedures and concrete mix. The test section shall be located within the new pavement limits and all costs associated with the test section shall be incidental to this item.

### **501-3.25 GRADE CONTROL FOR SLIP-FORM PAVERS**

Grade control on all free edges of slip-form pavement shall be from string lines. The use of transverse grade control from the paver will not be permitted.

### **501-3.26 PROTECTION OF PAVEMENT AGAINST RAIN**

In order that the concrete may be properly protected against the effects of rain before the concrete is sufficiently hardened, the Contractor will be required to have available at all times materials for the protection of the edges and surface of the unhardened concrete. Such protective materials shall consist of standard metal forms or wood plank having a nominal thickness of the pavement at its edge for the protection of the pavement edges, and covering material such as curing paper or polyethylene sheeting material for the protection of the surface of the pavement. The metal forms, wood planks and curing paper shall be kept on trucks or towable vehicles, within reasonable hauling distance, at a site shown on the plans, or as designated by the Engineer. Or, as an alternate, rolled polyethylene sheeting of sufficient length and width may be used without the temporary side forms and if properly anchored, to cover the plastic concrete slab and exposed edge. The sheeting may be mounted on either the paver or a separate moveable bridge from which it can be unrolled without dragging over the plastic concrete surface. When rain appears imminent, all paving operations shall stop and all available personnel shall begin covering the surface of the unhardened concrete with the protective covering. All pavement damaged shall be removed and replaced at no additional cost to the contract.

### **501-3.27 REMOVAL OF DEFECTIVE WORK**

At locations determined by the Engineer, the contractor shall be required to remove any pavement or sidewalk which is classified as defective. This includes any area where non-controlled (random) cracking occurs, unacceptable surface texturing or any other defect determined unacceptable by the Engineer. The pavement shall be removed to the nearest joint and replaced at the expense of the contractor. Prior to replacement, dowels and tie bars will be provided as directed by the Engineer.

## **BASIS OF PAYMENT**

### **501-5.1 GENERAL**

ADD:

Payment will be made under:

<b>ITEM AR501509</b>	<b>9" PCC PAVEMENT – PER SQUARE YARD.</b>
<b>ITEM AR501516</b>	<b>16" PCC PAVEMENT – PER SQUARE YARD.</b>
<b>ITEM AR501530</b>	<b>PCC TEST BATCH – PER EACH.</b>



**ITEM 602 – BITUMINOUS PRIME COAT**

**CONSTRUCTION METHODS**

**602-3.3 APPLICATION OF BITUMINOUS MATERIAL**

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

Areas worn from hauling operations shall be re-primed 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 – BITUMINOUS TACK COAT**

**CONSTRUCTION METHODS**

**603-3.3 APPLICATION OF BITUMINOUS MATERIAL**

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

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

**BASIS OF PAYMENT**

**603-5.1**

ADD:

Payment will be made under:

**ITEM AR603510      BITUMINOUS TACK COAT – PER GALLON.**

## **ITEM 605 – JOINT SEALING FILLER**

### **DESCRIPTION**

#### **605-1.1**

DELETE: This section.

ADD:

Joint sealing filler shall be provided to effectively seal the joints within the new Portland cement concrete pavement and between the new Portland cement concrete pavement and the existing bituminous and Portland cement concrete pavements. The cost of furnishing and installing joint sealing filler in new Portland cement concrete pavement and adjacent to new Portland cement concrete pavement shall be considered incidental to Item 501.

DELETE: The entire MATERIALS section and replace with:

### **MATERIALS AND EQUIPMENT**

#### **605-2.1 PREFORMED SEALS.**

Preformed joint seal materials shall be a vulcanized elastomeric compound using polychloroprene as the only base polymer. The material and the manufactured seal itself shall conform to ASTM D 2628 and CRD C 548. The joint seal shall be a labyrinth type seal with the uncompressed depth of the seal greater than the uncompressed width of the seal, [except that for seals 1 inch or greater in width, the depth need be only 1 inch or greater]. The actual width of the uncompressed seal shall be 11/16 inch for construction and contraction joints and 1 ¼ inches for expansion joints within a tolerance of plus 1/8 inch and minus 1/16 inch.

#### **605-2.2 LUBRICANT/ADHESIVE.**

Lubricant/adhesive used for the preformed elastomeric joint seal shall be a one-component compound conforming to ASTM D 2835.

#### **605-2.3 DELIVERY AND STORAGE.**

Materials delivered to the job site shall be inspected for defects, unloaded, and stored with a minimum of handling to avoid damage. Storage facilities shall be provided at the job site to protect materials from weather and to maintain them at temperatures as recommended by the manufacturer.

#### **605-2.4 SUBMITTALS.**

Certified copies of test results shall be provided 14 days prior to use of material on the project.

a. Construction Equipment List. List of proposed equipment to be used in the performance of construction work, including descriptive data shall be provided to the engineer 14 days prior to use on the project.

b. Manufacturer's Instructions. Where installation procedures, or any part thereof, are required to be in accordance with the manufacturer's recommendations, printed copies of these recommendations shall be furnished to the engineer 14 days prior to use on the project. Installation of the material will not be allowed until the recommendations are received. Failure to furnish these recommendations can be a cause for rejection of the material.

c. Samples. Regardless of testing responsibility, samples of the materials shall be submitted by the contractor to the engineer for written approval 30 days prior to use on the project. Written or printed directions from the manufacturer giving recommended criteria for installation shall be furnished to the engineer at the same time, plus certification from the manufacturer that the seal selected is recommend for the installation involved on this project. No material will be allowed to be used until it has been approved.

#### **605-2.5 TEST REQUIREMENTS.**

Each lot of preformed joint seal and lubricant/adhesive produced for this project shall be sampled, adequately identified, and tested for conformance with the referenced applicable material specification. A lot of preformed seal shall consist of one day's production or 20,000 linear feet for each cross section, whichever is less. A lot of lubricant/adhesive shall consist of one day's production. Testing of the preformed joint and lubricant/adhesive material shall be the responsibility of the Contractor and shall be performed in an approved independent laboratory and certified copies of the test reports shall be submitted for approval 14 days prior to the use of the materials at the job site. Samples of each lot of material shall also be submitted and will be retained by the Engineer for possible future testing should the materials appear defective during or after application. The Contractor shall furnish additional samples of materials, in sufficient quantity to be tested, upon request. Conformance with the requirements of the laboratory tests specified will not constitute final acceptance of the materials. Final acceptance will also be based on the performance of the in-place materials.

#### **605-2.6 SILICONE JOINT SEALER.**

Silicone joint sealer used for sealing the joint between new PCC pavement and new bituminous shoulder shall be Dow Corning 888 non-sag silicone or approved equal.

#### **605-2.7 BACKER ROD.**

Where use of backer rod is necessary, the backer rod shall conform to ASTM D 5249, Type 3, and to the dimensions shown on the plans.

#### **605-2.8 EQUIPMENT.**

Machines, tools, and equipment used in the performance of the work required by this section shall be approved by the engineer before the work is started and shall be maintained by the contractor in satisfactory condition at all times.

a. Joint Cleaning Equipment.

(1) Concrete Saw. A self-propelled power saw with water-cooled diamond or abrasive saw blades shall be provided for cutting joints to the depths and widths specified and for removing existing old joint seal filler or other material embedded in the joints or adhered to the joint faces.

(2) Sandblasting Equipment. Sandblasting equipment shall include an air compressor, hose, and a long-wearing venturi-type nozzle of proper size, shape, and opening. The maximum nozzle opening should not exceed 1/4 inch. The air compressor shall be portable and shall be capable of furnishing not less than 150 cubic feet per minute and maintaining a line pressure of not less than 90 psi at the nozzle while in use. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water. The nozzle shall have an adjustable guide that will hold the nozzle aligned with the joint about 1 inch above the pavement surface and will direct the blast to clean

the joint walls. The height, angle of inclination, and the size of the nozzle shall be adjusted as necessary to ensure satisfactory results.

(3) Waterblasting Equipment. Waterblasting equipment shall include a trailer-mounted water tank, pumps, high-pressure hose, a wand with safety release cutoff controls, nozzle, and auxiliary water resupply equipment. The water tank and auxiliary water resupply equipment shall be sufficient capacity to permit continuous operations. The pumps, hoses, wand, and nozzle shall be of sufficient capacity to permit the cleaning of both walls of the joint and the pavement surface for a width of at least 1/2 inch on either side of the joint. The pump shall be capable of supplying a pressure of at least 3,000 psi. A pressure gauge mounted at the pump shall show at all times the pressure in pounds per square inch at which the equipment is operating.

b. Joint Sealing Equipment.

(1) Preformed Seal Equipment. Equipment used to install the preformed seal shall place the preformed seal to the prescribed depths within the specified tolerances without cutting, nicking, twisting, or otherwise damaging the seal. The equipment shall not stretch or compress the seal more than 3.0 percent longitudinally during installation. The machine shall be an automatic self-propelled joint seal application equipment and shall be engine powered. The machine shall include a reservoir for the lubricant/adhesive, a device for conveying the lubricant/adhesive in the proper quantities to the sides the preformed seal or the sidewalls of the joint, a reel capable of holding one full spool of preformed seal, and a power-driven apparatus for feeding the joint seal through a compression device and inserting the seal into the joint. The equipment shall also include a guide to maintain the proper course along the joint being sealed. The machine shall at all times be operated by an experienced operator.

(2) Pourable Sealant Equipment. Equipment used to install pourable sealant shall consist of a power-driven apparatus capable of extruding the material as a continuous feed. The extruding nozzle tip of the machine shall be of such design as to fill the joint uniformly. This equipment requirement shall not apply to areas designated by the Resident Engineer as minor spall repair areas.

c. Crack Sealing Equipment. The routing machine utilized for crack sealing shall be an impact router equipped with carbide-tipped vertical-sided bits. It shall be portable and capable of routing existing asphalt and concrete surfaces along and adjacent to the crack and joint. The unit shall be capable of following random cracks and be designed to adjust the cutting widths. The unit shall be equipped with a cutter head clutch and shall have an adjustable depth control.

DELETE: The entire CONSTRUCTION METHODS section and replace with:

**CONSTRUCTION METHODS**

**605-3.1 ENVIRONMENTAL CONDITIONS.**

The ambient temperature and the pavement temperature within the joint wall shall be at least 40°F and rising at the time of installation for preformed joint seal and at least 50°F and rising at the time of application for pourable joint sealant. Sealant application will not be permitted if moisture or any foreign material is observed in the joint.

### **605-3.2 TRIAL JOINT SEAL AND LUBRICANT/ADHESIVE INSTALLATION.**

Prior to the cleaning and sealing of the joints for the entire project, a test section at least 200 feet long shall be prepared at a location directed in the project pavement using the specified materials and the approved equipment, so as to demonstrate the proposed joint preparation and sealing of all types of joints in the project. Following the completion of the trial length and before any other joint is sealed, the trial joints will be inspected by the Engineer to determine that the materials and installation meet the requirements specified. If materials or installation do not meet requirements the materials shall be removed, and the joints shall be recleaned and resealed at no cost to the owner. No other joints shall be sealed until the test installation has been approved. If the trial section is approved, it may be incorporated into the permanent work and paid for at the contract unit prices per linear foot for sealing items scheduled. All other joints shall be sealed in the manner approved for sealing the trial joints.

### **605-3.3 PREPARATION OF JOINTS.**

Immediately before installation of the preformed joint seal, the joints shall be thoroughly cleaned to remove all laitance, filler, old existing sealant, foreign material and protrusions of hardened concrete from the sides and upper edges of the joint space to be sealed. Any irregularity in the joint face that would prevent uniform contact between the joint seal and the joint face shall be corrected by sawing prior to the installation of the joint seal.

a. Sawing. Joints shall be sawed in two stages to clean and to open them to the full specified width and depth. The first stage saw cut shall consist of sawing joints to prevent random cracking according to Item 501. The second stage saw cut shall then be performed no earlier than 72 hours after the concrete has been placed. Immediately following the second stage saw cut, the joint faces and opening shall be thoroughly cleaned using a water jet with a minimum pressure of 3,000 psi to remove all saw cuttings or debris remaining on the faces or in the joint opening. Compression seal shall be installed within 3 calendar days of the time the individual joint cavity is sawed. Depth of sawing the cavity shall be between 3/4 and 1 inch deeper than the uncompressed depth of the seal (or otherwise recommended by the manufacturer). The saw cut for the joint seal cavity shall at all locations be centered over the joint line. The nominal width of the sawed joint seal cavity shall be as follows; the actual width shall be within a tolerance of plus or minus 1/16 inch:

(1) If a nominal 1.25 inch wide compression seal is furnished, the nominal width of the saw cut shall be 3/4 inches. However, this shall apply only when the pavement temperature at the time of sawing is between 25 and 140 degrees F. If the pavement temperature at the time of sawing is above this range, the nominal width of the saw cut shall be decreased 1/16 inch. If the pavement temperature at the time of sawing is below this range, the nominal width of the saw cut shall be increased 1/16 inch.

(2) If a nominal 11/16 inch wide compression seal is furnished, the nominal width of the saw cut shall be 3/8 inches. However, this shall apply only when the pavement temperature at the time of sawing is between 25 and 140 degrees F. If the pavement temperature at the time of sawing is above this range, the nominal width of the saw cut shall be decreased 1/16 inch. If the pavement temperature at the time of sawing is below this range, the nominal width of the saw cut shall be increased 1/16 inch.

The pavement temperature shall be measured and recorded in the presence of the Engineer. Measurement shall be made each day before commencing sawing and at any other time during the day when the temperature appears to be moving out of the allowable sawing range.

b. Sandblast Cleaning. The concrete joint faces and pavement surfaces extending at least 1/2 inch from the joint edges shall be sandblasted clean. A multiple pass technique shall be used until the surfaces are free of dust, direct curing compound, or any residue that might prevent

ready insertion or uniform contact of the seal and bonding of the lubricant/adhesive to the concrete. After final cleaning and immediately prior to sealing, the joints shall be blown out with compressed air at a minimum pressure of 90 psi and left completely free of debris and water.

c. Rate of Progress. The stages of joint preparation which includes sandblasting of the joint faces and air pressure cleaning of the joints shall be limited to only the linear footage of joint that can be sealed during the same workday.

#### **605-3.4 INSTALLATION OF THE PREFORMED SEAL.**

a. Time of Installation. Joints shall be sealed within 3 calendar days of sawing the joint seal cavity and immediately following the final cleaning of the joint walls. Open joints ready for sealing that cannot be sealed under the conditions specified herein shall be provided with an approved temporary seal to prevent infiltration of foreign material. When rain interrupts the sealing operations, the joints shall be washed, air pressure cleaned and allowed to dry prior to installing the lubricant/adhesive and preformed seal.

b. Sequence of Installation. Longitudinal joints shall be sealed first, followed by transverse joints and then all other joints. Seals in longitudinal joints shall be cut so that all transverse joint seals will be intact from edge to edge of the pavement. Intersections shall be made monolithic by use of joint seal adhesive and care in fitting the intersection parts together. Extender pieces of seal shall not be used at intersections. Any seal falling short of the intersection shall be removed and replaced with new seal at no additional cost to the owner.

#### **605-3.5 SEALING OF JOINTS WITH PREFORMED SEAL.**

The joint seal shall be installed using the equipment specified in paragraph 605-2.8b EQUIPMENT. The sides of the joint seal or the sides of the joint shall be covered with a coating of lubricant/adhesive and the seal installed in such a manner as to conform to all requirements specified. Butt joints and seal intersections shall be coated with liberal applications of lubricant/adhesive. Lubricant/adhesive spilled on the pavement shall be removed immediately to prevent setting on the pavement. An in-place joint seal shall be in an upright position and free from twisting, distortion, cuts, and stretching or compression in excess of 3.0 percent. The joint seal shall be placed at a uniform depth within the tolerances specified. In-place joint seal that fails to meet the specified requirements shall be removed and replaced with new joint seal in a satisfactory manner at no additional cost to the owner. The preformed joint seal shall be placed to a depth of 3/16 inch, plus or minus 1/8 inch, below the pavement surface except when the joint is beveled or has a radius at the surface, or unless otherwise directed. For beveled joints or joints with a radius at the surface, the preformed joint seal shall be installed at a depth of 1/8 inch, plus or minus 1/16 inch, below the bottom of the edge of the bevel or radius. No part of the seal shall be allowed to project above the surface of the pavement or above the edge of the bevel or radius. The seal shall be installed in the longest practicable lengths in longitudinal joints and shall be cut at the joint intersections so as to provide continuous installation of the seal in the transverse joints. The lubricant/adhesive in the longitudinal shall be allowed to set for 1 hour prior to cutting at the joint intersections to reduce the possibility of shrinkage. For all transverse joints, the minimum length of the preformed joint seal shall be the pavement width from edge to edge.

A manufacturer's technical representative of the preformed joint seal shall be on site for the first two days during the installation and for the installation of the test section.

#### **605-3.6 SEALING OF JOINTS WITH POURABLE SEALANT.**

Joint preparation and sealant installation shall be accomplished within the same day. These operations will only be allowed to proceed when the joint is dry and the air temperature is above 50°F.

If the joint becomes wet and/or dirty during sealing, sealing will not be permitted to resume until the joint has been restored to a clean and dry state.

**A pourable sealant shall be applied at all intersections of the longitudinal and transverse preformed seals.**

### **605-3.7 CLEANUP.**

Upon completion of the project, all unused materials shall be removed from the site, all lubricant/adhesive on the pavement surface shall be removed, and the pavement shall be left in clean condition. The Airport shall have the option of retaining any unused material already purchased for the project and delivered to the site prior to the Contractor removing the excess material from the site. Upon completion of each day's work, all lubricant/adhesive on the pavement surface, sand, and other debris remaining on the pavement shall be removed from the pavement to the satisfaction of the Resident Engineer and/or Airport. A vacuum sweeper truck shall be available at no additional cost to the owner for the purpose of cleaning the pavement.

### **605-3.8 WARRANTY.**

A warranty for a period of 12 months from the date of final acceptance shall be provided by the Contractor to cover defects in materials and workmanship for all work performed by the Contractor or any subcontractor or supplier at any tier.

The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of:

- (1) The Contractor's failure to conform to contract requirements; or
- (2) Any defect of equipment, material, workmanship, or design furnished by the Contractor.

The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

The Owner will notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall:

- (1) Obtain all warranties that would be given in normal commercial practice;
- (2) Require all warranties to be executed, in writing, for the benefit of the owner, as directed by the owner, and
- (3) Enforce all warranties for the benefit of the owner.

This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.



ADD the following section:

### **QUALITY CONTROL**

#### **605-4.1 QUALITY CONTROL PROVISIONS.**

a. Equipment. The application equipment shall be inspected to assure uniform application of lubricant/adhesive to the sides of the preformed joint seal or the walls of the joint. If any equipment causes cutting, twisting, nicking, excessive stretching or compressing of the preformed seal, or improper application of the lubricant/adhesive, the operation shall be suspended until causes of the deficiencies are determined and corrected by the contractor.

b. Procedures.

(1) Quality control provisions shall be provided during the joint cleaning process to prevent or correct improper equipment and cleaning techniques that damage the concrete in any manner. Cleaned joints shall be approved by the Engineer prior to installation of the lubricant/adhesive and preformed joint seal.

(2) Conformance to stretching and compression limitations shall be determined by the engineer. After installation, the distance between the marks shall be measured on the pavement. If the stretching or compression exceeds the specified limit, the seal shall be removed and replaced with new joint seal at no additional cost to the owner. The seal shall be removed up to the last correct measurement. The seal shall be inspected a minimum of once per 500 feet of seal for compliance to the shrinkage or compression requirements. Measurements shall also be made as directed to determine conformance with depth and width installation requirements. All preformed seal that is not in conformance with specification requirements shall be removed and replaced with new joint seal at no additional cost to the owner. The maximum allowable amount of stretch shall be 3.0%.

c. Product. The joint sealing system (preformed seal and lubricant/adhesive) shall be inspected by the engineer for proper rate of cure and bonding to the concrete, cuts, twists, nicks, and other deficiencies. Seals exhibiting any defects, at any time prior to final acceptance of the project, shall be removed from the joint, wasted, and replaced in a satisfactory manner, as determined by the engineer.

DELETE: The entire METHOD OF MEASUREMENT section and replace with:

### **METHOD OF MEASUREMENT**

#### **605-5.1**

The joint sawing and sealing for the new PCC pavement, the new PCC pavement and existing PCC pavement interface, and the new PCC pavement and new bituminous pavement interface shall be incidental to Item 501. No separate measurement for payment will be made for this item.

DELETE: The entire BASIS OF PAYMENT section and replace with:

### **BASIS OF PAYMENT**

#### **605-5.1**

No direct payment will be made for joint sealing in new PCC Pavement and shall be incidental to Item 501.

## ITEM 620 – PAVEMENT MARKING

### MATERIALS

#### 620-2.2 PAINT

DELETE Item 19. EPOXY.

ADD:

All paint shall be waterborne. The paint shall contain no lead, chromium, cadmium or barium.

#### 620-2.3 REFLECTIVE MEDIA

REPLACE this section with the following:

Glass beads shall meet the requirements for Federal Specification TT-B-1325D, Type III. Glass beads shall be treated with all compatible agents recommended by the manufacturer of the paint and reflective media to ensure adhesion and embedment.

### CONSTRUCTION METHODS

#### 620-3.5 APPLICATION

REPLACE TABLE 1 with the following:

TABLE 1. Application Rates for Paint and Glass Beads

Paint Type	Paint Square feet per gallon, ft <sup>2</sup> /gal	Glass Beads, Type III Pounds per gallon of paint, lb/gal
Waterborne	115 ft <sup>2</sup> /gal maximum	10 lb/gal minimum

ADD after TABLE 1 the following:

The paint shall be applied in two (2) separate applications for all markings. The first application of the pavement markings shall be made at 25% of the application rate minus glass beads. The second application shall be made at 100% of the application rate with glass beads. The time lapse between the two applications shall be per the manufacturer's recommendations.

For pavement areas that require joint sealing or crack sealing as part of the contract, the paint shall be applied after completion of the sealing work unless otherwise noted on the plans.

### METHOD OF MEASUREMENT

#### 620-4.1

ADD:

The quantity of permanent markings to be paid for shall be the number of square feet of painting with the specified material **measured only once to apply two coats** in conformance with the specifications and accepted by the Engineer. Reflective media shall not be measured for payment but shall be considered incidental to the pavement marking work.

**BASIS OF PAYMENT**

**620-5.1**

ADD:

Payment will be made under:

**ITEM AR620520  
ITEM AR620525**

**PAVEMENT MARKING-WATERBORNE – PER SQUARE FOOT.  
PAVEMENT MARKING-BLACK BORDER – PER SQUARE FOOT.**

## **DIVISION IV – DRAINAGE**

### **ITEM 701 – PIPE FOR STORM SEWERS AND CULVERTS**

#### **MATERIALS**

##### **701-2.1 GENERAL**

DELETE: Entire Section.

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 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.

##### **701-3.2 CRADLES**

REPLACE in this section all references to “Item 208-2.3” with “Item 208-2.2”.

##### **701-3.3 LAYING AND INSTALLING PIPE**

ADD:

The Contractor shall record the final “as-built” elevations for the end of each pipe run and provide the elevations to the Engineer.

When sewer installation requires tapping into an existing manhole or inlet, 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:

<b>ITEM AR701524</b>	<b>24” RCP, CLASS IV – PER LINEAR FOOT.</b>
<b>ITEM AR701530</b>	<b>30” RCP, CLASS IV – PER LINEAR FOOT.</b>
<b>ITEM AR701900</b>	<b>REMOVE PIPE – PER LINEAR FOOT.</b>

## **ITEM 705 – PIPE UNDERDRAINS FOR AIRPORTS**

### **DESCRIPTION**

#### **705-1.1**

ADD to the end of this section the following:

This work includes a filter fabric envelope/sock around the perforated tubing and a geotextile fabric around the porous backfill.

### **MATERIALS**

#### **705-2.13 FILTER FABRIC ENVELOPES FOR PERFORATED (PE) TUBING**

ADD:

##### Materials

- (a) An IDOT-approved filter fabric sock may be submitted for approval by the Engineer.

#### **705-2.15 UNDERDRAIN TRENCH ENVELOPE**

ADD:

Geotechnical fabric for UD trench lining shall consist of woven or nonwoven filaments of polypropylene, polyester or polyethylene. Nonwoven fabric may be needle punched, heat-bonded, resin-bonded or combinations thereof. The filaments must be dimensionally stable (i.e., filaments must maintain their relative position with respect to each other) and resistant to delamination. The filaments must be free from any chemical treatment or coating that might significantly reduce porosity and permeability.

- (a) Physical Properties. The fabric shall comply with the following physical properties:

Weight oz./sq. yd (g/m <sup>2</sup> )	3.5 (120) min.	ASTM D 3776
Grab tensile strength lbs. (N)	100 (450 <sup>1/</sup> ) min. <sub>1/</sub>	ASTM D 4632
Grab elongation @ break (%)	20 min. 1/	ASTM D 4632
Equivalent opening size (EOS NO.)		CW-02215-77 Corps of Engineers
Nonwoven	30 (600 μm) min <sub>2/</sub>	
Woven	50 (300 μm) min <sub>2/</sub>	

- 1/ For woven fabric, test results shall be referenced to orientation with warp or fill, whichever the case may be. Both woven and nonwoven fabrics shall be tested wet.  
2/ Manufacturer's certification of fabric to meet requirements.

## **CONSTRUCTION METHODS**

### **705-3.3 LAYING AND INSTALLING PIPE**

REVISE this section to read:

Corrugated polyethylene tubing underdrain shall be constructed as follows:

Trenches shall be excavated to the dimensions and grades required by the plans or as directed by the Engineer.

Trenches shall be lined with the underdrain trench envelope prior to placing any stone or underdrain. A 2-foot minimum lap of material is required where breaks in the fabric occur. Prior to installing the pipe, a 4" layer of porous backfill meeting the requirements of Paragraph 2.5 shall be constructed in the bottom of the trench.

Perforated, corrugated polyethylene tubing with filter fabric sock shall be seated in the porous backfill and held firmly in place, while porous backfill meeting the requirements of Paragraph 2.5 is placed to a height of 5 inches  $\pm$  1 inch above the tubing. After the first lift is compacted to the satisfaction of the Engineer, the remainder of the backfill shall be placed and compacted. The underdrain trench envelope is then folded over the backfilled trench and weighted down with 1" to 2" of porous backfill.

Perforated, corrugated polyethylene tubing shall be laid true to grade and shall not be stretched more than 5% during installation.

The Contractor shall be required to establish control grade on the underdrain pipe to ensure the pipe is installed at the proper elevation. Contract grade elevations are to be provided to the resident engineer upon request.

### **705-3.10 HANDLING AND STORAGE**

ADD:

The subsurface drain shall be shipped in a black protective wrapping to eliminate potential fabric deterioration due to prolonged exposure to sunlight.

## **BASIS OF PAYMENT**

### **705-5.1**

ADD as the last sentence of the first paragraph:

The underdrain trench envelope shall be considered incidental to the underdrain and shall not be measured for payment purposes. Direction connections to inlets, manholes, and storm sewer pipe shall be considered incidental to the underdrain and shall not be measured for payment purposes.

ADD:

Payment will be made under:

<b>ITEM AR705526</b>	<b>6" PERFORATED UNDERDRAIN W/SOCK – PER LINEAR FOOT.</b>
<b>ITEM AR705635</b>	<b>UNDERDRAIN COLLECTION STRUCTURE – PER EACH.</b>
<b>ITEM AR705640</b>	<b>UNDERDRAIN CLEANOUT – PER EACH.</b>

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

### **DESCRIPTION**

#### **751-1.1**

ADD:

Specifically, this item consists of the construction of trench drains and storm sewer manholes as shown on the plans or as directed by the Engineer.

Trench drain inlets shall be as shown on the plans.

### **MATERIALS**

#### **751-2.9 MANHOLES**

ADD:

Manholes shall be rated for aircraft traffic loading with a 50,000 pound per tire load spread over 235 square inches. Castings are to support 100,000 pound wheel loads with 250 psi tire pressure. The Contractor shall submit manufacturer's shop drawing showing details and design calculations for approval prior to installation. Shop drawings shall be sealed by a registered professional structural engineer.

### **CONSTRUCTION METHODS**

#### **751-3.1 UNCLASSIFIED EXCAVATION**

ADD:

F. DEWATERING – 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.

#### **751-3.3 CONCRETE STRUCTURES**

ADD to the end of the 1<sup>st</sup> paragraph the following:

Manholes shall be installed on a 6" IDOT CA-11 under the manhole bottom. No more than 8" maximum concrete adjusting rings may be utilized to meet the grades specified. All lift lug holes shall be sealed watertight.

#### **751-3.7 PLACEMENT AND TREATMENT OF CASTINGS, FRAMES, AND FITTINGS**

ADD to the end of the 1<sup>st</sup> paragraph the following:

All cleanouts, collection structures, manholes, inlets, trench drains, hand holes, and other miscellaneous structures located in pavement shall be installed flush with the pavement or up to 1/4" below the pavement. Any structure with a finished rim elevation that exceeds the surface elevation of the adjacent pavement shall be adjusted by the Contractor at no additional cost to the contract.

**BASIS OF PAYMENT**

**751-5.1**

ADD:

Payment will be made under:

**ITEM AR751540**  
**ITEM AR801971**

**MANHOLE 4' – PER EACH.**  
**4' X 20' TRENCH DRAIN – PER EACH.**



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

**DESCRIPTION**

**752-1.1**

ADD:

This item shall also consist of the installation of new flared end sections and the relocation of existing flared end sections as shown on the plans, or as directed by the Engineer.

**METHOD OF MEASUREMENT**

**752-4.1**

ADD after the 1<sup>st</sup> sentence:

The number of flared end sections relocated shall be counted and measured by each unit removed, relocated, and installed in a new location as shown on the plans and accepted by the Engineer.

**BASIS OF PAYMENT**

**752-5.1**

ADD:

The number of flared end sections relocated will be paid for at the contract unit price per each, removed, relocated and installed in a new location as shown on the plans and accepted by the Engineer. This price shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling and placing of materials and for all labor, equipment, tools and incidentals necessary to complete this work.

Payment will be made under:

<b>ITEM AR752424</b>	<b>PRECAST REINFORCED CONC. FES 24" – PER EACH.</b>
<b>ITEM AR752430</b>	<b>PRECAST REINFORCED CONC. FES 30" – PER EACH.</b>
<b>ITEM AR752900</b>	<b>REMOVE END SECTION – PER EACH.</b>

## **DIVISION V – TURFING**

### **ITEM 901 – SEEDING**

#### **CONSTRUCTION METHODS**

##### **901-3.2 DRY APPLICATION METHOD**

ADD to the end of item C. Seeding the following:

The seed shall be lightly raked into the soil to a depth of ½ inch.

##### **901-3.3 WET APPLICATION METHOD**

DELETE the 4<sup>th</sup> paragraph of item D. Spraying and REPLACE with the following:

Special care shall be taken to prevent any of the slurry from being sprayed onto any hardscape areas including concrete walks, pavements, fences, buildings, runway and taxiway edge lights, etc. Any slurry sprayed onto surfaces other than those to be seeded shall be washed immediately before the slurry dries.

All seed and fertilizer applied by the spray method shall be raked into the soil or rolled prior to mulching unless otherwise approved by the Resident Engineer.

##### **901-3.4 MAINTENANCE OF SEEDED AREAS**

REPLACE in the 3<sup>rd</sup> sentence of the 1<sup>st</sup> paragraph the word “directed” with “needed”.

ADD:

##### **901-3.5 ACCEPTANCE**

The performance standard shall be met before acceptance of the work. It will be required that the Contractor establish a good stand of grass of uniform color and density to the satisfaction of the Engineer. A grass stand shall be considered adequate when bare spots are one square foot or less, randomly dispersed, and do not exceed 3% of the area seeded. Inspection for acceptance will be made within 60 days after seeding, excluding seeding dates that fall between November 2 and March 31. Seeding dates that fall between November 2 and March 31 will be evaluated no earlier than May 1. Payment for the unaccepted portions **will be made at 50% the contract unit price upon completion of the seeding and the remaining 50% of the contract unit price** will be withheld until such time as the requirements specified herein have been satisfied.

#### **METHOD OF MEASUREMENT**

##### **901-4.1**

REVISE the 1<sup>st</sup> sentence to read as follows:

The quantity of seeding to be paid for shall be the number of acres, measured to the nearest 1/10 acre, seeded limed and fertilized as specified, measured on the ground surface, completed and accepted.

**BASIS OF PAYMENT**

**901-5.1**

ADD:

Payment will be made under:

**ITEM AR901510      SEEDING – PER ACRE.**

**ITEM 904 – SODDING**

**BASIS OF PAYMENT**

**904-5.1**

ADD:

Payment will be made under:

**ITEM AR904510      SODDING – PER SQUARE YARD.**

**ITEM 905 – TOPSOILING**

**DESCRIPTION**

**905-1.1**

ADD:

Specifically, this item shall consist of obtaining topsoil from within the proposed work area and placing it as the top 4 inches in fill areas. Excess topsoil shall be disposed of on airport property as specified in Item 152 for excess cut or as directed by the Resident Engineer. If there is a shortage of suitable topsoil, no off site topsoil will be required.

## **ITEM 908 - MULCHING**

DELETE the entire specification and REPLACE with the following:

### **DESCRIPTION**

**908-1.1** This work shall consist of furnishing, hauling, placing, and securing hydraulically applied mulch on surfaces indicated on the plans or as designated by the engineer. Disturbed areas outside of authorized construction limits shall be mulched at the contractor's expense. This work may be combined with the seeding described in Item 901.

### **MATERIALS**

**908-2.1 HYDRAULICALLY APPLIED MULCH MATERIALS.** No vegetative mulch will be allowed on this project for areas located inside the Airport Operations Area (AOA). In lieu of the vegetative mulch, a hydraulically applied mulch material shall be applied. The mulch material shall be North American Green HydraCM or approved equal and shall be green in color.

The contractor shall furnish a manufacturer's certification in triplicate certifying that the hydraulically applied mulch materials comply with these specifications. The engineer may sample and test these materials prior to approval and use. Acceptance will be based upon a satisfactory certification and results of any test deemed necessary by the engineer.

For areas located outside the AOA, the material specified above may be substituted with straw applied at a rate of 2 to 3 tons per acre.

### **CONSTRUCTION METHODS**

**908-3.1 MULCHING.** Before spreading mulch, all stones larger than 2 inches in any diameter, sticks, stumps, and other debris shall be removed from the area to be mulched. All mulch shall be distributed evenly over the area to be mulched within 24 hours following the seeding operation.

Special care shall be taken to prevent any of the slurry from being sprayed onto any hardscape areas including concrete walks, pavements, fences, buildings, runway and taxiway edge lights, etc. Any slurry sprayed onto surfaces other than those to be mulched shall be washed immediately before the slurry dries.

The hydraulically applied mulch shall be mixed and applied according to the manufacturers recommendations. The Contractor shall provide the Engineer a copy of the manufacturer's installation procedures a minimum of seven (7) calendar days prior to the start of the work.

The mulch material shall be mixed with water in a manner to provide a homogenous slurry as recommended by the manufacturer. Equipment for mixing and applying the slurry shall be capable of applying it uniformly over the seeded ground surface. The slurry mixture shall be agitated during application to keep the ingredients thoroughly mixed.

The mulch material shall be applied at a rate of 2,500 pounds per acre.

**908-3.2 CARE AND REPAIR.** Following the overspray operation, precautions shall be taken to prohibit foot or vehicular traffic over the mulched area. The contractor shall be required to repair or replace any mulching that is defective or becomes damaged until the project is finally accepted. When, in the judgment of the engineer, such defects or damages are the result of poor workmanship or failure to meet the requirements of the specifications, the cost of the necessary repairs or replacement shall be borne by the contractor.

However, once the contractor has completed the mulching of any area in accordance with the provisions of the specifications and to the satisfaction of the engineer, no additional work at his/her expense will be required, but subsequent repairs and replacements deemed necessary by the engineer shall be made by the contractor and will be paid for as additional or extra work in accordance with Section 20-04 of the General Provisions.

#### **METHOD OF MEASUREMENT**

**908-4.1** Measurement of mulch will be made to the nearest 1/10 acre of the area mulched.

#### **BASIS OF PAYMENT**

**908-5.1** Payment shall be made at the contract unit price per acre or fraction thereof, for the accepted quantity of mulching. The price shall be full compensation for furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

Payment will be made under:

**ITEM AR908510      MULCHING – PER ACRE.**

## **DIVISION VI – LIGHTING INSTALLATION**

### **ITEM 108 – INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS**

#### **DESCRIPTON**

##### **108-1.1**

DELETE: The 3<sup>rd</sup> sentence of the first paragraph.

ADD:

This item of work shall consist of the underground installation of counterpoise, 600V and 5000V cables in PVC conduit or duct bank at the locations shown on the plans and in accordance with these specifications. When crossing existing utilities or as required by the Engineer, the Contractor shall hand dig the trenches for the proposed cables.

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

#### **EQUIPMENT AND MATERIALS**

##### **108-2.1 GENERAL**

ADD to the end of item A. the following:

Airport lighting equipment and materials shall also meet the requirements of Title 49 U.S.C. Section 50101 for Buy American or shall have received a waiver approved by FAA prior to the use of the equipment and materials on the project.

##### **108-2.2 CABLE**

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

All series circuit cable shall be L-824, 1/C, No. 8, 5000 V in 2" PVC conduit. Cable shall be paid for under pay item AR108108 -1/C #8 5 KV UG CABLE.

ADD:

Type TC Cable – Where indicated on Plans, Type TC Cable shall be Power and Control Tray Cable, Type TC per NEC Article 336, 600V rated, a factory assembly of two or more insulated conductors, with or without associated bare or covered grounding conductors, under a nonmetallic jacket. Type TC cable shall also be resistant to moisture and corrosive agents and suitable for use in wet locations. Conductor AWG shall be as indicated on the Plans. Cables shall be paid for under pay items AR801977- TYPE TC - 2-#12, 1-#12 GND, 600V and AR801978- TYPE TC - 7-#14, 600V.

Type USE – Where indicated on Plans, Type USE Cable shall be 600 Volt rated, sized as indicated on the drawings. Cable shall comply with Underwriters Laboratories Standard U.L. 44 (for Type RHW-2) and U.L. 854 (for Type USE-2) and shall pass the IEEE 383, 70,000 BTU/hr and VW-1 Flame Tests. Cable insulation shall be abrasion, moisture, heat and sunlight resistant black cross-linked polyethylene (XLP). Cables shall be rated for use at 90°C in both wet and dry locations and be suitable for use in conduit, underground service entrance cable and direct burial applications. Cables



shall be paid for under pay items AR108602 - 3/C #2 600 V UG CABLE and AR108606- 3/C #6 600 V UG CABLE, and shall include associated Ground cables.

#### **108-2.4 CABLE CONNECTIONS**

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

ADD:

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

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

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

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

#### **108-2.7 HEAT SHRINK TUBING**

ADD:

Heat shrink tubing for 600V, general power distribution cable tap splice (T-splice) shall be Raychem CRSM-CT or equal.

### **CONSTRUCTION METHODS**

#### **108-3.1 GENERAL**

ADD:

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

#### **108-3.2 INSTALLATION IN CONDUIT**

ADD:

The Contractor shall install 2" PVC conduit in trench between lights.

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.

### **108-3.3 TRENCHING**

ADD:

The installation of PVC conduit using the plowing method shall not be allowed.

### **108-3.5 SPLICING**

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

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

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

### **108-3.10 LOCATING OF EXISTING CABLES**

ADD:

Contact Personnel are listed in Section 50-17 herein.

### **108-3.11 TERMINATIONS AND CONNECTIONS**

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

ADD:

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

## **METHOD OF MEASUREMENT**

### **108-4.2**

ADD to the end of the 1<sup>st</sup> paragraph the following:

Grounds rods to be installed as shown on the plans for the counterpoise shall be not be measured for payment but shall be considered incidental to the counterpoise work.

## **BASIS OF PAYMENT**

### **108-5.1**

ADD:

Payment will be made under:

ITEM AR108108	1/C #8 5 KV UG CABLE – PER LINEAR FOOT.
ITEM AR108602	3/C #2 600 V UG CABLE – PER LINEAR FOOT.
ITEM AR108606	3/C #6 600 V UG CABLE – PER LINEAR FOOT.

**ITEM AR108706**  
**ITEM AR801977**  
**ITEM AR801978**

**1/C #6 COUNTERPOISE – PER LINEAR FOOT.**  
**TYPE TC - 2-#12, 1-#12 GND, 600V – PER LINEAR FOOT.**  
**TYPE TC - 7-#14, 600V – PER LINEAR FOOT.**

## **ITEM 110 – INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT**

### **DESCRIPTION**

#### **110-1.1**

ADD:

This item shall consist of the construction of new direct earth bury PVC conduit, galvanized rigid steel conduit and concrete encased duct banks including appropriate duct markers at the locations shown in the plans or as directed by the Engineer.

### **EQUIPMENT AND MATERIALS**

ADD:

#### **110-2.9 LINE MARKING TAPE**

The line marking tape shall be approximately 5 mils thick constructed of aluminum foil encased in an impervious mylar plastic coating. The minimum tensile strength determined in accordance with ASTM D 882 is 1600 per square inch. The tape shall contain sufficient metal mass to provide detectability at depths up to 3 feet with a radio type metal locator. Tape shall be acid, alkali and corrosion resistant. Color shall be "RED" corresponding to the standard color for electric lines.

The tape shall be "Type III Super Tuff" detectable underground utility line marking tape as manufactured by LINEGUARD, Inc. of Wheaton, Illinois or an approved equal.

ADD:

#### **110-2.10 DUCT MARKER**

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

Contractor shall provide duct markers for each proposed concrete encased duct or existing duct being used as detailed on the plans. The cost of installation of the duct markers shall be incidental to the contract.

ADD:

#### **110-2.11 ELECTRICAL HANDHOLES**

The Contractor shall install handholes at locations specified and as detailed on the plans. The electric handholes shall be Dabico Model DAB-25/41/41WPBD-PBA pull box or approved equal.

ADD:

#### **110-2.12 AGGREGATE BACKFILL**

Crushed stone material conforming to the requirements of Item 209 gradation shall be used for backfill at the pavement crossings for the proposed duct installation. The granular material shall be compacted to not less than 95% of Modified Proctor laboratory density. In lieu of Aggregate, the contractor may substitute Controlled Low Strength Material (CLSM) backfill for those areas requiring aggregate backfill. This substitution must be approved in writing prior to construction and must be completed at no additional cost to the contract. The CLSM material will be considered incidental to the associated duct item.

### **CONSTRUCTION METHODS**

#### **110-3.5 BACKFILLING**

ADD:

Crushed stone conforming to the requirements of Item 208 gradation shall be used for backfill at the pavement crossings for the new duct installation. The granular material shall be compacted to not less than 95% of Modified Proctor laboratory density.

### **METHOD OF MEASUREMENT**

#### **110-4.1**

DELETE this section and REPLACE with the following:

The quantity of concrete encased duct and direct earth buried PVC conduit to be paid for shall be the number of linear feet installed, measured in place, completed, and accepted. No separate measurement will be made for individual ducts in a multi-way duct system. The quantity shall also include trench, backfill and duct markers.

The quantity of conduit including galvanized rigid steel conduit associated with the fumigation facility and electric actuator for the butterfly valve shall not be measured separately for payment but shall be considered incidental to the respective work.

#### **110-4.2**

DELETE this section and REPLACE with the following:

The quantity of electrical handholes to be paid for shall be the number of each installed in place and accepted by the Engineer.

### **BASIS OF PAYMENT**

#### **110-5.1**

DELETE this section and REPLACE with the following:

Payment will be made at the contract unit price per linear foot for each type and size of concrete encased duct bank and PVC conduit completed and accepted. Payment will be made at the contract unit price per each electrical handhole completed and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, aggregate backfill, backfill, compaction, sawcutting and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete these items.

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

Payment will be made under:

<b>ITEM AR110202</b>	<b>2" PVC DUCT, DIRECT BURY – PER LINEAR FOOT.</b>
<b>ITEM AR110501</b>	<b>1-WAY CONC. ENCASED DUCT – PER LINEAR FOOT.</b>
<b>ITEM AR110502</b>	<b>2-WAY CONCRETE ENCASED DUCT – PER LINEAR FOOT.</b>
<b>ITEM AR110503</b>	<b>3-WAY CONCRETE ENCASED DUCT – PER LINEAR FOOT.</b>
<b>ITEM AR110610</b>	<b>ELECTRICAL HANDHOLE – PER EACH.</b>

## **ITEM 125 – INSTALLATION OF AIRPORT LIGHTING SYSTEMS**

### **DESCRIPTION**

#### **125-1.1**

ADD:

Airfield lighting improvements and modifications shall include:

- Installation of new L-867 base cans with isolation transformers
- Installation of new LED medium intensity taxiway lights.
- Relocation of existing medium intensity base mounted taxiway lights.

ADD:

#### **125-1.9 INSPECTION AND TEST**

##### **VISUAL EXAMINATION**

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

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

##### **ELECTRICAL TESTS ON SERIES LIGHTING CIRCUITS**

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

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

##### **LIGHTING FIXTURES**

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

## **FINAL ACCEPTANCE TESTS**

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

- (a) Operate each switch for the modified lighting circuits from the remote control position (ATCT) so that each switch position is reached at least twice. During this process, all lights and vault equipment shall be observed to determine that each switch properly controls the corresponding circuit.
- (b) Repeat the above test using the local control switches on the regulators.
- (c) Each lighting circuit shall be tested by operating it continuously at maximum brightness for at least 6 hours. Visual inspection shall be made at the beginning and end of this test to determine that the correct numbers of lights are operating at full brightness. Dimming of some or all of the lights in a circuit is an indication of grounded cables.
- (d) In addition to the above, all equipment shall be subjected to any and all performance tests specified in the manufacturer's instructions.
- (e) Photometric testing. The Airport may, upon completion of the lighting installation and as part of acceptance testing, perform field photometric testing of each new light fixture to assure the installed runway lights meet the photometric requirements specified by FAA. The test results will be recorded and furnished to the Contractor, with any noted deficiencies. The Contractor is responsible for correcting any deficiencies at no additional cost to the Owner.

### **125-1.10 GUARANTEE**

All equipment furnished and work performed under the Contract Documents shall be guaranteed against defects in materials or workmanship for a period of one (1) year from the date of final acceptance. This guarantee does not replace any responsibility for errors or omissions as set forth in state law. Any long-term warranties issued or offered by manufacturers for items of equipment shall be turned over to the Airport.

### **125-1.11**

Any failure of equipment or work due to defects in materials or workmanship shall be corrected by the Contractor at no cost to the Airport.

### **125-1.12**

The Contractor shall ascertain that all lighting system components furnished by him (including FAA approved equipment) are compatible in all respects with each other and the remainder of the new/existing system. Any incompatible components furnished by the Contractor shall be replaced by him at no additional cost to the Airport with a similar unit approved by the Project Engineer (different model or manufacturer) that is compatible with the remainder of the airport lighting system.

### **125-1.13**

The Contractor-installed equipment (including FAA approved) shall not generate any electromagnetic interference in the existing and/or new communications, weather and air traffic control equipment. Any equipment generating such interferences shall be replaced by the Contractor at no additional cost with the equipment meeting applicable specifications and not generating any interference.



## **EQUIPMENT AND MATERIALS**

### **125-2.1 GENERAL**

ADD to the end of the section the following:

In addition to the above requirements, all equipment and materials shall also meet the requirements of Title 49 U.S.C. Section 50101 for Buy American or shall have received a waiver approved by FAA prior to the use of the equipment and materials on the project.

### **125-2.7 ISOLATION TRANSFORMERS**

REPLACE this section with the following:

New L-830-1 isolation transformers purchased by the Contractor to be used with the Airport provided MITL shall be 6.6/6.6A – 10/15W and as shown on the plans.

### **125-2.8 LIGHT CANS**

ADD:

3/8" thick blank cover plates shall be provided for existing cans where the elevated taxiway light is to be removed and the can left in place.

ADD:

### **125-2.14 MEDIUM INTENSITY TAXIWAY LIGHTS**

**The Airport will provide new Medium Intensity Taxiway Lights (MITL) for installation by the Contractor. The Contractor will not need to purchase the light fixtures.** The Airport will provide LED MITL as manufactured by Crouse Hinds (part no. 8615-T2-B-066-24) without artic kit.

## **CONSTRUCTION METHODS**

### **125-3.1 GENERAL**

ADD:

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

ADD:

### **125-3.4 PHASING AND INTERRUPTIONS**

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

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

### **METHOD OF MEASUREMENT**

#### **125-4.1**

REPLACE this section with the following:

The quantity of Airport provided lights to be paid for shall be the number of each type installed by the Contractor as completed units in place, ready for operation, and accepted by the Engineer.

The quantity of lights relocated to be paid for shall be the number of each removed and reinstalled at a new location as shown on the plans and accepted by the Engineer.

### **BASIS OF PAYMENT**

#### **125-5.1**

REPLACE this section with the following:

Payment will be made at the contract unit price for each complete light installed in place by the Contractor and accepted by the Engineer. This price shall be full compensation for furnishing all materials except the Airport provided light fixture and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made at the contract unit price for each light removed, reinstalled at a new location, and accepted by the Engineer. This price shall be full compensation for furnishing all materials including blank cover plates where required and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

<b>ITEM AR125415</b>	<b>MITL-BASE MOUNTED – PER EACH.</b>
<b>ITEM AR125565</b>	<b>SPLICE CAN – PER EACH.</b>
<b>ITEM AR125962</b>	<b>RELOCATE BASE MOUNTED LIGHT – PER EACH.</b>

## **DIVISION VIII – MISCELLANEOUS**

### **ITEM 770500 – SANITARY SEWER PIPE**

#### **DESCRIPTION**

##### **770-1.1**

Under this item, the Contractor shall provide all labor, equipment and materials necessary to construct the sanitary sewer for glycol collection as shown on the plans. Testing of all sanitary sewer shall be done by the Contractor and witnessed by the Engineer.

Granular cradle and granular backfill will be incidental to this item and shall not be measured for separate payment under Item Sanitary Sewer.

All work shall conform to the *Standard Specifications for Water and Sewer Main Construction in Illinois*. If any conflicts exist between the *Standard Specifications for Water and Sewer Main Construction in Illinois* and this specification, this specification shall apply.

#### **MATERIALS**

##### **770-2.1 PVC PIPE**

1. Except where shown otherwise on the plans, solid wall PVC pipe and fittings shall be permitted on this project for sewers up to 24" in diameter. PVC pipe shall meet either the sewer pipe specification or the pressure pipe specification listed below depending upon the depth of sewer installed.
2. For sewer 15 feet deep or less, SDR 35 solid wall PVC sewer pipe shall be permitted. Pipe shall conform to ASTM Specification D-3034 (latest version). Joints shall be the rubber-gasketed slip-on type.
3. For sewer greater than 15 feet deep but less than 30 feet deep, PVC sewer pipe as specified in the above paragraph shall be permitted only if Type B granular cradle is furnished and installed up to 12 inches over the pipe.
4. For sewer 21 feet deep or less, PVC pressure rated pipe shall be permitted as follows. Pipe 12" in diameter or smaller shall meet AWWA Specification C900 (latest revision) DR25, or shall meet ASTM Specification D2241 (latest revision) SDR 26. Either Type A or Type B granular cradle shall be permitted for embedment.

##### **770-2.2 CONCRETE**

Miscellaneous concrete shall meet the requirements of section 610.

##### **770-2.2 GRANULAR CRADLE**

Material for granular cradle for pipe shall be stone screenings, crushed stone, pit run gravel, washed gravel, or other granular material approved by the Engineer. The granular cradle material shall be of two basic types, Type A and Type B. Both types of granular cradle material shall be a crushed stone well graded material within the gradation limits stated below, and shall be free from excess soft or unsound particles or other objectionable matter

**GRANULAR CRADLE GRADATIONS**

<b>Type A Granular Cradle</b>		<b>Type B Granular Cradle</b>	
Sieve Size	% Passing	Sieve Size	% Passing
1-1/2"	100	1"	90-100
1"	90-100	1/2"	30-60
1/2"	60-90	#4	0-10
#4	30-60		
#16	10-40		
#200	4-12		

**770-2.3 GRANULAR BACKFILL**

Backfill - The material used for trench backfill shall be aggregate meeting the requirements Item 701.

**CONSTRUCTION METHODS**

**770-3.1 BURIED PIPING SYSTEMS**

- A. All buried piping shall have a minimum of 6" of compacted granular cradle for pipe sizes 20" and smaller and a minimum of 12" of compacted granular cradle for pipe sizes 24" and larger unless shown otherwise on the drawings. All buried piping shall be backfilled with compacted granular material. The granular backfill shall be used in locations where piping runs of any kind cross bituminous roadways, where one pipe crosses another and where piping spans from undisturbed earth to the wall of the structure. For selected pavement crossings granular backfill shall be used from the top of the gravel cradle to the bottom of the pavement base and shall be compacted by jetting before the pavement base is placed. Where one pipe crosses another, or spans to a building wall, granular backfill shall be used to the midpoint of the highest pipe. The types of granular cradle and granular backfill materials shall be as specified.
- B. Excavation and backfill shall include all excavation, backfilling, compacting, disposal of surplus material, and all other work incidental to the construction of trenches, including any additional excavation which may be required for manholes or other structures forming a part of the pipe line.
- C. All buried PVC pipe shall be installed with a parallel 14-gauge copper wire with green colored THHN insulation within six inches above the pipe. The wire shall be continuous without splices. Wire shall terminate at structures or hydrants approximately 12 inches above grade.
- D. Depth of Pipe Cover: Unless otherwise shown or directed, all pipe shall be laid to minimum depth of three feet six inches (3'-6") measured from the existing ground surface or established grade to the top of the barrels of the pipe. In areas subject to subsequent excavation or fill, the pipes shall be laid to grades provided by the Engineer.

- E. Excavation: The trench shall be dug to the depth and alignment required and only so far in advance of pipe laying as the Engineer shall permit. The trench shall be so braced and drained that workmen may work therein safely and efficiently. The Contractor shall note that excavations shall conform to the latest OSHA requirements for excavations. It is essential that the discharge from pumps be led to natural drainage channels or to drains. The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground structures and piping, both known and unknown, may be determined, and he shall be held responsible for the repair of such structures and piping when broken or otherwise damaged by him.
- F. Width: The trench width may vary with and depend upon the depth of the trench and the nature of the excavated material encountered, but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill to be placed and compacted properly. The minimum width of unsheeted trench shall be 2'-6".
- G. Pipe Foundations: The trench, unless otherwise specified, shall have a curved bottom conforming to the pipe diameter and the grade to which the pipe is to be laid. The pipe shall be laid on compacted granular cradle so that the barrel of the pipe will have a bearing for its full length. Reliefs shall be excavated for joints.
- H. Granular Cradle
1. The type of granular cradle to be used in specific locations will be designated by the Engineer. The granular cradle shall extend a minimum of 6" below the pipe for 20" and smaller, and a minimum of 12" below the pipe for 24" and larger up to the springline of the pipe.
  2. Where the natural foundation soil, on which the pipe is to be bedded, consists of granular material suitable in its natural state for shaping and embedding a pipe, no granular cradle will be required, if approved by the Engineer.
  3. For reasonably good, non-granular foundation conditions, Type A granular cradle will be designated. Where, in the opinion of the Engineer, the foundation conditions are not suitable for the use of Type A granular cradle, Type B granular cradle or concrete shall be used; the actual selection to be made by the Engineer.
  4. The cost of the granular cradle shall be considered incidental to the cost of the sewer pipe runs, and separate payment will not be made therefore.
  5. The Contractor shall notify the Engineer of the source of material he proposes to use for "Granular Cradle Material" and arrange for samples to be taken and tested prior to the time such material is ordered to the site. Material graded to sizes other than those specified may be substituted for that specified, providing the gradation and samples are first submitted and approved for the intended purpose by the Engineer.
  6. All granular cradle materials shall be compacted to a minimum of 95% Standard Proctor Density in accordance with ASTM D698 and at not more than 2% below nor more than 3% above the optimum moisture content.
  7. Over-excavation Backfill Requirement: In cases where the trench excavation is carried beyond or below the lines and grades given by the Engineer, the Contractor shall, at his own expense, backfill all such excavated space with granular cradle material in layers not to exceed eight (8) inches in thickness and compact each layer solidly in place. Where, in the opinion of the Engineer, the excavation has been carried excessively below the lines and

grades given by the Engineer, the Contractor shall be required to have a minimum of one moisture density test, in accordance with ASTM D698 (Standard Proctor Test) made on the backfill material. The Contractor shall be responsible for all Standard Proctor Density Tests required for this backfill and costs for the tests shall be considered incidental to the work. Once the Standard Proctor Tests have been run, the Contractor shall, at his own expense, refill all such excessively excavated space. The backfill material shall be placed in 6 to 8 inch layers and then compacted to a minimum of 95% Standard Proctor density or that necessary to prevent settlement. Compaction of granular cradle materials within three feet of the walls of a structure shall be accomplished by the use of hand operated compaction equipment. Use of heavy compaction equipment within three feet of the walls of a structure will not be allowed. Compaction of backfill by jetting shall not be permitted under any circumstances.

#### I. Granular Backfill

1. The granular backfill shall be used in locations where piping runs of any kind cross bituminous roadways, where one pipe crosses another and where piping spans from undisturbed earth to the wall of the structure. For selected pavement crossings granular backfill shall be used from the top of the gravel cradle to the bottom of the pavement base and shall be compacted by jetting before the pavement base is placed. Where one pipe crosses another, or spans to a building wall, granular backfill shall be used to the midpoint of the highest pipe. Where one pipe crosses another, or spans to a building wall, granular backfill material shall be used and compacted as described below (unless the structure requires a specific backfill material). The Contractor shall notify the Engineer of the source of material he proposes to use for granular backfill and arrange for samples to be taken and tested prior to the time such material is ordered to the site. Material gradation results shall be submitted to the Engineer for approval prior to hauling to the site.
2. Granular backfill for flexible pipe shall conform to ASTM Specification D2321 (latest revision). Type A or Type B shall be placed in two stages, one to the top of the pipe, and a second lift to at least 6" over the top pipe for 15" and smaller. For sewers 18" and larger, second stage shall be at least 12" over the pipe.
3. All granular backfill material shall be compacted in maximum 8" lifts to a minimum of 95% Standard Proctor Density in accordance with ASTM D698 and at not more than 2% below nor more than 3% above the optimum moisture content .
4. Care shall be taken during backfilling operations so that adjacent newly placed concrete will not be disturbed as a result of vibration due to compaction equipment.
5. No frozen materials shall be placed in pipe trenches as backfill materials.

#### J. Pipe Laying

1. Laying of pipe shall be accomplished to line and grade in the trench only after it has been dewatered and the foundation and/or bedding has been prepared. Mud, silt, gravel and other foreign material shall be kept out of the pipe and off the jointing the surface.
2. All pipe laid shall be retained in position so as to maintain alignment and joint closure until sufficient backfill has been completed to adequately hold the pipe in place. All pipe shall be laid to conform to the prescribed lines and grades shown on the plans, with the limits that follow. Laser equipment shall be used for laying gravity piping.
3. Variance from established line and grade shall not be greater than one thirty-second (1/32) of an inch per inch of pipe diameter and not to exceed one-half (1/2) inch, provided that any such variation does not result in a level or reverse sloping invert; provided also, that variation

in the invert elevation between adjoining ends of pipe, due to non-concentricity of joining surface and pipe interior surfaces, does not exceed one sixty-fourth (1/64) per inch of pipe diameter, or one-half (1/2) inch maximum.

- 4.. Gravity piping, unless otherwise approved by the Engineer, shall be laid up grade from point of connection to the existing piping or from a designated starting point. The pipe shall be installed with the bell end forward or upgrade, unless approved otherwise. When pipe laying is not in progress the forward end of the pipe shall be kept tightly closed with an approved temporary plug.

K. Miscellaneous Pipe Construction Requirements

1. Braced and Sheeted Trenches: Whenever necessary to prevent caving, excavations in sand, gravel, sandy soil or other unstable materials shall be adequately sheeted and braced. Where sheeting and bracing are used, the trench width shall be increased accordingly. Trench sheeting shall remain in place until the pipe has been laid, tested for defects, and repaired if necessary, and the backfill around it compacted to a depth of two feet over the top of the pipe.
2. Trenching by Machine or by Hand: The use of trench digging machinery will be permitted except in places where operation of same will cause damage to trees, buildings or existing structures above or below ground, in which case hand methods shall be employed.
3. Flow of Drains and Sewers Maintained: Adequate provision shall be made for the flow of sewers, drains and water courses encountered during the construction and the structures which may have been disturbed shall be satisfactorily restored upon completion of the work.
4. Property Protection: Trees, fences, poles and all other property shall be protected unless the removal is authorized and any property damaged shall be satisfactorily restored by the Contractor.
5. Manner of Handling Pipe and Accessories in the Trench: Proper implements, tools and facilities satisfactory to the Engineer shall be provided and used by the Contractor for the safe and convenient completion of the work. All pipe fittings, valves and hydrants shall be carefully lowered into the trench, piece by piece, by means of derrick, ropes or other suitable tools or equipment in such manner as to prevent damage to pipe or pipe coating. Under no circumstances shall pipe or accessories be dropped or dumped into the trench.
6. Piling Excavated Material: All excavated material shall be piled in a manner that will not endanger the work and that will avoid obstructing roadways and airspace. The top elevation of any pile shall not penetrate the surfaces defined by F.A.R. Title 14 Part 77 – Objects Affecting Navigable Airspace. Fire hydrants under pressure, valve pit covers, valve boxes, manholes, electrical vaults, or other utility controls shall be left unobstructed and accessible until the work is completed. Natural watercourses shall not be obstructed. Surplus material and excavated material unsuitable for backfilling shall be transported and disposed of off the site in disposal areas obtained by the Contractor.
7. Removal of Water: The Contractor shall at all times during construction provide and maintain ample means and devices with which to promptly remove and properly dispose of all water entering the excavations or other parts of the work until all work to be performed therein has been completed. No water containing settleable solids shall be discharged into storm sewers. The proposed method for controls of groundwater shall be submitted to the Engineer for approval.

No additional compensation will be allowed for groundwater removal. Groundwater

information is shown in the Geotechnical Report, available for inspection and copying at the Engineer's office. The Contractor, in entering this Agreement, accepts that the presence and nature of groundwater in this area is not an unanticipated condition, and no such claim will result therefrom, notwithstanding any other provision of the Contract Documents.

8. Pipe Kept Clean: All foreign matter or dirt shall be removed from the inside of the pipe before it is lowered in its position in the trench, and it shall be kept clean by approved means during and after laying. If, in the opinion of the Engineer, the pipe contains dirt that will not be removed during the flushing operation, the interior of the pipe shall be cleaned and swabbed, as necessary, with a bactericidal solution made up with calcium hypochlorite, chlorinated lime or sodium hypochlorite.
9. Preventing Trench Water From Entering Pipe: At times when the pipe laying is not in progress, the open ends of the pipe shall be closed by approved means, and no trench water shall be permitted to enter the pipe.
10. Cutting Pipe: Cutting of pipe for inserting valves, fittings or closure pieces shall be done in a workmanlike manner without damage to the pipe.
11. Permissible Deflections of Joints: Whenever necessary to deflect pipe from a straight line either in a vertical or horizontal plane to avoid obstructions, to plumb stems, or where long radius curves are permitted, the degree of deflection shall be no greater than recommended by the pipe manufacturer and shall be approved by the Engineer.
12. Plugging Dead Ends: Plugs shall be inserted into the joints of all dead end pipes, tees or crosses.
13. Barricades, Guards and Safety Provisions: To protect persons from injury and to avoid property damage, adequate barricades, construction signs, lights and guards as required shall be placed and maintained by the Contractor at his expense during the progress of the construction work and until it is safe for traffic to use the pavements. All material piles, equipment and pipe which may serve as obstructions to traffic shall be enclosed by fences or barricades and shall be protected by proper lights when the visibility is poor. The rules and regulations of OSHA and the appropriate authorities respecting safety provisions shall be observed. Additionally, FAA AC 150/5370-2E shall be observed.
14. Structure Protection: Temporary support, adequate protection and maintenance of all underground and surface structures, drains, piping and other obstructions encountered in the progress of the work shall be furnished by the Contractor at his expense. The structures which may have been disturbed shall be restored upon completion of the work.
15. Cleaning Up: Surplus pipe line materials, tools and temporary structures shall be removed by the Contractor; and all dirt, rubbish and excess earth from excavation shall be hauled to a landfill by the Contractor, and the construction site shall be left clean, to the satisfaction of the Engineer and the Owner.
16. Compaction Limits: All granular backfill and structural backfill materials shall be compacted with portable, hand operated type compactors when the backfilling is within 3 feet of a structure wall or up to 2 feet minimum above the top of the pipe in the trench. In other areas where accessible, larger compaction equipment may be utilized.
17. Concrete Cradle: Where subgrade conditions, in the opinion of the Engineer, warrant extra precautions for the bedding of pipe, the Engineer may order the construction of a concrete cradle to be installed. The design requirements for a concrete cradle shall be furnished by the Engineer. Payment for the concrete cradle shall be by Change Order as extra work.



## **770-3.2 PIPE TESTING**

### A. Gravity Sanitary Sewer Testing

1. The Contractor shall be required to test all the sanitary sewers and drain lines installed on this project and all sections will be required to pass testing as outlined below.
2. Leakage tests shall be performed after the lines have been cleaned and the trench backfilled.
3. All gravity sanitary sewers and drain lines shall be tested by exfiltration of water or exfiltration of air. The appropriate method of leakage testing shall be determined by the Engineer based on field conditions. Along the section of sewer to be tested, the Contractor shall determine the groundwater level at each end manhole and at all intermediate manholes. The groundwater level outside each manhole shall be measured outside the manhole by excavation down to the sewer to be tested, or shall be measured in the manhole by the use of clear tubing and piping which extends through the manhole wall at or below the top of the sewer pipe to be tested. The hole through the manhole shall be sealed following successful completion of all leakage testing.
4. All manholes shall be included in the water exfiltration and infiltration test methods. If the exfiltration of air method is used, manholes shall be separately tested by water infiltration or exfiltration test. If the infiltration method is used, the ground around the manhole shall be soaked and water standing up to the top of the manhole. Manholes shall be bottle tight with no leakage.
5. The Contractor shall furnish the water to be used during the test when the exfiltration method of testing is used. If the City water system is used, all water shall be metered and the Contractor shall pay the City according to their current rates. All sewers shall be required to meet allowable leakage criteria in accordance with City of Mascoutah requirements. If any section fails to meet the test, the section shall be repaired or replaced at the Contractor's expense and retested until it meets the leakage limits. Pressure grout or concrete encasement will not be acceptable methods of repair of joints.
6. The Contractor shall be required to conduct deflection testing on each type of flexible sewer pipe or drain (ABS and PVC composite and PVC sewer pipe). Deflection testing shall be performed on all flexible sewer which is installed. Sections of sewer shall be tested no sooner than 30 days after the sewer has been installed. Where feasible, testing shall be initiated at the downstream sections of the sewer and be followed by the upstream sections. Testing shall be performed by pulling through the sewer by hand a rigid ball or mandrel having an outside diameter equal to 95% of the base inside diameter of the pipe as established in the ASTM Standard D3034. Base inside diameter shall be determined for truss pipe in a similar manner to that used for PVC pipe. Other instruments for measuring deflection may be used if they are approved by the Engineer.
7. Deflection of flexible pipe shall not exceed 5% of the base inside diameter. In the event that the deflection exceeds the 5% limit in 10% or more of the manhole intervals tested, the total sewer project shall be tested.
8. Where deflection is found to be in excess of 5% of the original pipe diameter, the Contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. However, should after the initial testing the deflected pipe fail to return to the original size (inside diameter) the line shall be replaced.

### **770-3.3 CONNECTION TO EXISTING SEWERS**

#### **A. Connection to Existing Sanitary Manhole**

This item shall cover when required connection to an existing sanitary sewer manhole, as shown on the plans.

These connections consist of providing a new opening in the existing sanitary sewer manhole (existing manhole locations are shown on drawings) to allow the installation of proposed interconnecting sanitary force main. Costs for installing the interconnecting sanitary force main shall be covered under separate pay items.

Payment shall be made at the unit bid price for manhole connections and shall be full compensation for providing an opening in the existing manhole by approved methods; all manhole accessories, diversion of wastewater flow, temporary plugs, grouting, forming of manhole invert and all other work necessary for a complete and operational connection.

#### **B. Maintaining Existing Sewer In-Service**

The existing sewer must be kept in continuous operation throughout the construction period. Portions of the existing sewer may be taken out of service for short periods corresponding with periods of minimum service demands provided permission is obtained from Owner in advance and no interruption will be permitted which adversely affects the degree of service provided. The contractor shall provide temporary facilities and make any temporary modifications as necessary to keep the existing sewer in operation during the construction period.

### **770-3.4 SURVEY LINE AND GRADE**

Survey line and grade control hubs at a fifty (50) foot maximum spacing and at a change in line and grade will be provided by the Contractor, except a greater interval may be used in conjunction with the use of a laser in maintaining line and grade.

The Contractor shall constantly check line and grade of the laser beam and the pipe and in the event they do not meet specified limits described hereinafter, the work shall be immediately stopped, the Engineer notified, and the cause remedied before proceeding with the work.

### **770-3.5 DEWATERING**

Dewatering sufficient to maintain the water level 12 inches below the surface of the trench bottom or base of the bedding course, shall be accomplished prior to pipe laying and jointing, if not prior to excavation and placing of the bedding as called for in other sections of the specifications or Special Provisions. The dewatering operation, however accomplished, shall be carried out so that it does not destroy or weaken the strength of the soil under or alongside the trench. The normal water table shall be restored to its natural level in such a manner as to not disturb the pipe and its foundation. **Cost of any dewatering operations shall be incidental to the sanitary sewer.**

### **770-3.6 QUALITY ASSURANCE**

Proper and suitable tools and appliances for the safe and convenient handling and placing of the pipes, specials and valves shall be used. All pieces shall be carefully examined for defects and no piece shall be laid which is known to be defective. If any defective piece should be discovered after having been laid, it shall be removed and replaced with a sound piece, in a satisfactory manner, by the Contractor at his own expense. The pipes, specials, and valves shall be thoroughly cleaned

before they are placed, shall be kept clean until they are accepted in the completed work, and when laid shall conform accurately to the lines and elevations as specified.

The drawings show the general arrangement for both underground and exposed piping systems. Whenever the Contractor deems it necessary to deviate from the arrangements shown, he shall submit to the Engineer in writing a request for the deviation, along with drawings showing the proposed new arrangement. Deviation shall not be made until approval of new arrangements is obtained. Wherever piping arrangements are shown or required to be modified to accommodate the equipment approved for installation, the Contractor shall prepare and submit for approval detailed shop drawings of the new arrangement. Only new and unused materials shall be installed in the work specified herein.

The contract drawings are not intended to show every fitting, offset, or similar item. Piping systems shall include all unions, fittings, flanges, anchors, valves, gaskets, nipples, strainers, hangers, vents, gauges, or other equipment necessary for the proper installation of the various systems, but shall include not less than that shown in the contract drawings. Piping shall be arranged and installed approximately as indicated, straight, plumb, and as direct as possible, and in such manner that right angles or parallel lines are formed with building walls. All pipes shall be cut accurately to measurements established at the building and shall be installed without springing or forcing. All changes in direction of piping shall be made with fittings. Reduction in sizes of pipes shall be made with reducing fittings. Bushings will not be permitted unless specifically detailed on the drawings.

- A. The Contractor shall establish and maintain quality control of all equipment and construction operations involved under this item. To assure compliance with contract requirements, the contractor shall maintain records of his quality control for all items listed below.
1. Check for damage to and defects in materials.
  2. Check for proper storage of materials and provide a systematic listing of these items and their location.
  3. Check to see that shop drawings on all piping systems have been submitted and are approved.
  4. Check to see that all piping materials conform to approved shop drawings.
  5. Review requirements of plans and specifications and check layouts.

A copy of these records shall be kept at the jobsite and shall be available at all times for the Engineer's review.

- B. All manufactured items shall be standard commercial products of reputable manufacturers. Where materials are shown on the drawings or listed but not specifically covered by a standard or specification, the Contractor shall furnish best commercial grades of material or articles subject to the approval of the Engineer. When two or more articles of the same material or equipment are required, similar articles of the same size shall be products of a single manufacturer.
- C. The Contractor shall furnish the Engineer with sufficient copies of the manufacturer's sworn certificates and test results from a reputable testing laboratory showing the results of tests made on all pipe delivered to the project in accordance with the ASTM, AWWA, or ANSI Specifications for the various types of pipe to be furnished. All expenses incidental to the pipe testing shall be considered as included in the prices bid for pipe furnished and installed, and no additional payment will be allowed therefore.

The Contractor shall furnish the Engineer with lists, in duplicate, of all pieces of pipe and fittings in

each shipment received, and these lists shall give the serial or mark number, weight, class, size and description of each item received at the jobsite.

#### D. SUBMITTALS

##### 1. Shop Drawings:

The Contractor is required to submit to the Engineer complete drawings of each piping system to be installed showing locations, dimensions, and details of all runs of piping, including piping sizes, pipe materials, fittings, valves, supports, and other equipment. Detailed drawings of any proposed departure due to actual field conditions or other causes shall be included with the foregoing submittal. The manufacturer's catalog description of all valves, supports, equipment, and other items shall also be submitted for approval to show conformance with the requirements of these specifications and the contract drawings. The piping shop drawings shall be new drawings prepared by the Contractor, not a mark-up of contract drawings, and the shop drawings shall have a bill of material on each drawing defining all items mentioned above. All catalog and descriptive data shall note where the specific item is to be installed and a cross reference made on the piping show drawings.

2. Submit a copy of the most current published NSF 61 listing of each pipe type, diameter, and lining, to be furnished for potable water service.
3. Granular Cradle - Sieve Analysis and Sample
4. Granular Backfill - Sieve Analysis and Sample
5. Boring and Jacking Plan.
6. Potable Water Distribution Line Disinfection.

#### E. MAINTENANCE SERVICE (WARRANTY)

1. The Contractor shall warrant the equipment to be free of material or workmanship defects for a period of one year from the date of substantial completion established by the Owner.
2. The Contractor shall provide warranty for all items under this section for one year from the date of acceptance by the Owner. During that one year, the Contractor shall at his expense replace any part or parts which malfunction or corrode due to defective manufacture or installation

### **METHOD OF MEASUREMENT**

#### **770-4.1**

Sanitary sewer will be measured by the lineal foot in place. Sanitary sewer shall be measured along the centerline of the pipe to the center of the wall of each manhole or connection.

### **BASIS OF PAYMENT**

#### **770-5.1**

Payment for sanitary sewer shall be made at the contract unit price per lineal foot bid for each size of sanitary sewer specified of the appropriate material, application and depth. Payment shall be full compensation for excavation, connections to proposed/existing manholes, bedding, installation of

sewer, compaction, testing and televising, and all labor, materials, equipment as shown on the plans and as specified herein to provide a complete and operational sanitary sewer.

Bedding and trench backfill will be incidental to the respective item and shall not be measured for payment.

If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 30-18, 40-01, 40-03 and 40-11 of the Standard and Special Provisions, the pay item shall not be included on the Construction Progress Payment report until such submittals have been furnished.

Payment will be made under:

<b>ITEM AR770508</b>	<b>8" SANITARY SEWER – PER LINEAR FOOT.</b>
<b>ITEM AR770515</b>	<b>15" SANITARY SEWER – PER LINEAR FOOT.</b>

## **ITEM 770700 – SANITARY MANHOLES**

### **DESCRIPTION**

#### **770-1.1**

This item shall include installation of sanitary manholes as shown on the plans and specified herein.

### **MATERIALS**

#### **770-2.1**

Manholes for sanitary sewer shall meet the requirements set forth in Section 32 of the "Standard for Water and Sewer Main Construction in Illinois" (latest edition). Manholes will be precast concrete and watertight with an elastomeric seal for sanitary manhole pipe entrances. Manhole castings shall be as shown on the plans. The letters "ADFW" shall be cast in the lid. Cast iron manhole frame shall have solid lid with concealed pickhole and watertight gasket. Manholes shall be rated for aircraft traffic loading with a 50,000 pound per tire load spread over 235 square inches. Castings are to support 100,000 pound wheel loads with 250 psi tire pressure. The Contractor shall submit manufacturer's shop drawing showing details and design calculations for approval prior to installation. Shop drawings shall be sealed by a registered professional structural engineer.

Manhole steps shall be furnished and installed as shown on the plans and shall be polypropylene coated steel reinforcing roads as manufactured by M.A. Industries, Catalog No. M.A. PS 1 PF, or equal.

#### **770-2.2**

Connections between a sanitary manhole and sanitary sewer pipe shall be watertight. The connection shall utilize a connector which meets ASTM C-923 "Resilient Connectors Between Reinforced Concrete Manhole Structures and Pipes" (Latest revision). The connector shall be cast in the manhole wall and shall be capable of remaining watertight for pipe deflection up to 10° in any direction and for differential loading between pipe and manhole. The manhole connection shall be A-lok Products, Inc. or equal.

#### **770-2.3**

The frame, chimney and top lip of the cone section shall be sealed with a chimney seal. Chimney seal shall be "Adaptor-Seal", "Infa-Seal", or equal.

Each manhole cone and barrel section joint shall also be externally sealed with a 6" wide (min.) sealing band of rubber and mastic. The band shall have an outer layer of rubber or polyethylene with an under layer of rubberized mastic meeting the requirements of ASTM C-877.

### **CONSTRUCTION METHODS**

#### **770-3.1**

Manholes shall be installed on a 6" IDOT CA-11 under the manhole bottom. No more than 8" maximum concrete adjusting rings may be utilized to meet the grades specified. All lift lug holes shall be sealed watertight.

#### **770-3.2**

Backfill requirements and material shall be selected granular material as specified under Item 701-3.7.

### **770-3.3**

Each manhole shall be vacuum tested after final surface restoration has been completed. All lift holes shall be plugged with a non-shrinking grout. The manhole frame, adjusting rings and chimney seals shall be in place when testing. No grout shall be placed in the horizontal joints before testing. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole. A vacuum of ten (10) inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to nine (9) inches of mercury (Hg) for the following time periods for each size manhole:

- Forty-eight (48) inches Diameter – sixty (60) seconds
- Sixty (60) inches Diameter – seventy-five (75) seconds
- Seventy-two (72) inches Diameter – ninety (90) seconds

Manhole testing will be in accordance with ASTM-1244. The contractor shall provide all material and equipment necessary for testing. Should the manhole fail the vacuum test, all leaks shall be sealed with an approved non-shrinking grout and re-tested until a satisfactory result is obtained.

### **770-3.4**

Dewatering - Dewatering sufficient to maintain the water level 12 inches below the surface of the excavation bottom or base of the bedding course, shall be accomplished prior to manhole installation, if not prior to excavation and placing of the bedding as called for in other sections of the specifications or Special Provisions. The dewatering operation, however accomplished, shall be carried out so that it does not destroy or weaken the strength of the soil under or alongside the excavation. The normal water table shall be restored to its natural level in such a manner as to not disturb the manhole. **Cost of any dewatering operations shall be incidental to the manhole.**

## **METHOD OF MEASUREMENT**

### **770-4.1**

Sanitary manholes will be measured in units for each specified diameter of sanitary manhole installed and accepted by the Engineer.

## **BASIS OF PAYMENT**

### **770-5.1**

Payment for furnishing and installing manholes, including all appurtenances, connections and backfilling, shall be at the contract unit price each bid for SANITARY MANHOLE of the appropriate diameter.

If, upon delivery and incorporation of any materials, the Contractor has failed to provide the necessary submittals as required by Sections 30-18, 40-01, 40-03 and 40-11 of the Standard and Special Provisions, the pay item shall not be included on the Construction Progress Payment report until such submittals have been furnished.

Payment will be made under:

**ITEM AR770704                      SANITARY MANHOLE 4' – PER EACH.**

## **ITEM 801972 – BUTTERFLY VALVES**

### **DESCRIPTION**

#### **801972-1.1 SUMMARY**

Section includes:

- A. Butterfly valves.
- B. Extensions.
- C. Electric operators.
- D. 15A-2P 480V Circuit Breaker

Except as noted herein, this section does not include the related conduit, wiring or electrical handhole. These items are specified elsewhere.

#### **801972-1.2 SYSTEM DESCRIPTION**

A. Design Requirements:

- 1. Provide bubble-tight at rated pressures with flow in either direction.
- 2. Satisfactory for applications involving frequent operation and applications involving valve operation after long periods of inactivity.
- 3. Except as modified or supplemented herein, conform butterfly valves including operators, to requirements of AWWA C504, latest edition.

B. Complete Unit

- 1. Valve, extension, and operator shall include all incidental components to allow operation as a complete unit.
- 2. Valve, extension, and operator shall be supplied by single source to assure compatibility of individual components.

C. 15A-2P 480V Circuit Breaker

- 1. Circuit breaker shall match existing circuit breakers in existing 480V Power Panel in manufacture and type.
- 2. This item shall also include furnishing and installing the 1" GRS Conduit in conformance with Item 108 from the existing 480V Power Panel to the existing Glycol Control Valve Control Panel.

#### **801972-1.3 SUBMITTALS**

A. Shop Drawings:

- 1. Submit in accordance with Section 30-18 of the Illinois Standard Specifications for Construction of Airports, adopted November 2, 2009.

B. Operation and Maintenance (O&M) Data:

- 1. Submit in accordance with Section 30-18 of the Illinois Standard Specifications for Construction of Airports, adopted November 2, 2009.



## **MATERIALS**

### **801972-2.1 BUTTERFLY VALVES**

- A. Manufacturers
  - 1. Norrisseal (Norris R-series to match Owners existing equipment)
  - 2. Or approved equal.
- B. General:
  - 1. Provide tight-closing, rubber seat type with seats fastened to valve body or valve disk.
  - 2. AWWA C504, Class 200
  - 3. Pressure rated at 200psi
  - 4. Temperature rated at 250°F
  - 5. All valve parts must be resistant to glycols and jet fuel.
- C. Valve Bodies:
  - 1. Full lug body
  - 2. Ductile Iron: ASTM A395.
- D. Valve Shafts:
  - 1. Stainless steel, ASTM A276, Type 316
- E. Valve Seats:
  - 1. EPDM Elastomer Seat
  - 2. Field replaceable valve seats.
- F. Valve Discs:
  - 1. Aluminum bronze, ASTM B148 Alloy
  - 2. 360 Degree Sealing Tilted Disc
- G. ISO Mounting, 5.000" Bolt Circle

### **801972-2.2 TUBE AND STEM EXTENSION**

- A. Tube and stem extension to be custom fabricated to extend the valve actuator as shown on the drawings
  - 1. Tube – carbon steel
  - 2. Stem – stainless steel
- B. Field verify required extension dimensions prior to shop drawing submittal.

### **801972-2.3 VALVE OPERATORS**

- A. Electric Actuators:
  - 1. Manufacturers:
    - a. Rotork (IQT Series 250 to match Owner's existing equipment)
    - b. Or equal.

2. Package-unit, designed for open-close control of quarter turn valve.
3. Removable from valve without taking valve out of service.
4. Electrical components factory prewired, except devices located remote from actuator.
5. Integral electrical terminals in separately sealed terminal compartment for field wiring connections.
6. Power Supply: 480 V, single-phase (see electrical drawings)
7. Motor: 24V DC permanent magnet, low inertia motor
8. Local Controls:
  - a. Non-intrusive selectors on control cover for Local/Stop/Remote
  - b. Non-intrusive selectors on control cover for Open/Close
  - c. Infrared setting tool to be supplied with dedicated open, stop, and close buttons (operational over a distance of 0.75 meters)
9. Local Indication:
  - a. Back-lit liquid crystal display giving digital indication from fully open to fully closed in 1% increments.
  - b. Three LED's colored red, green, and yellow for indication of open, close, and intermediate positions.
10. Remote Control / Indication
  - a. See Item AR801973 CONTROL SWITCHES.
11. Enclosure: watertight to NEMA 4, 4X, and 6
12. Adjustable open/closing times
13. Manual Operation:
  - a. Engageable manual declutch lever override.
  - b. Hand wheel for manual operation of valve.
  - c. Safety interlock feature that automatically disengages declutch lever when motor is energized.
14. Wiring shall meet the requirements of Item 108 and shall be as shown on the plans or as recommended by the actuator manufacturer.

### **CONSTRUCTION METHODS**

#### **801972-3.1 INSTALLATION**

- A. Install equipment in accordance with manufacturer's written instructions and approved submittals.

#### **801972-3.2 FIELD QUALITY CONTROL**

- A. Manufacturer's Field Service:
  1. Supplier or manufacturer shall direct services to specific system and equipment operation, maintenance, and troubleshooting.

### **METHOD OF MEASUREMENT**

#### **801972-4.1**

The number of valves with actuators of each size and type shall be counted and measured per each complete unit installed and accepted by the Engineer. This item shall also include one 15A-2P 480V circuit breaker installed in exist power Panel.

**BASIS OF PAYMENT**

**801972-5.1**

The accepted number of 8" Valve & Actuator will be paid for at the contract unit price per each, complete and in place, including installation of one 15A-2P 480V circuit breaker installed in existing 480V Power Panel, and 1" GRS Conduit as indicated on Plans. This price shall be full compensation for furnishing all materials and for all preparation and placing of the materials; furnishing and installation of all mounting brackets and hardware; furnishing and installation of such specials (including infrared setting tool) and connections 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 valve, extension, and actuator assembly.

Payment will be made under:

**ITEM AR801972      8" VALVE & ACTUATOR – PER EACH.**

## **ITEM 801973 – CONTROL SWITCHES**

### **DESCRIPTION**

#### **801973-1.1 SUMMARY**

Section includes:

- A. Lighted Push Buttons.

#### **801973-1.2 SYSTEM DESCRIPTION**

- A. Design Requirements:

1. Provide compatible lighted push button controls on existing control station for motor operated butterfly valves.

#### **801973-1.3 SUBMITTALS**

- A. Shop Drawings:

1. Submit in accordance with Section 30-18 of the Illinois Standard Specifications for Construction of Airports, adopted November 2, 2009.

- B. Operation and Maintenance (O&M) Data:

1. Submit in accordance with Section 30-18 of the Illinois Standard Specifications for Construction of Airports, adopted November 2, 2009.

### **MATERIALS**

#### **801973-2.1 LIGHTED PUSH BUTTON CONTROLS**

- A. General: The control station switches and legend plates shall be compatible with the existing controls and shall be as indicated below:

1. Diecast NEMA 4/13 Box; Part No. AB-800T-2TZ
2. Momentary Pushbutton Green Illuminated – Guarded; Part No. AB-800T-QAH24G or approved equal.
3. Momentary Pushbutton Red Illuminated – Guarded; Part No. AB-800T-QAH24R or approved equal.
4. Legend Plate “OPEN”; Part No. AB-800T-X531 or approved equal.
5. Legend Plate “CLOSED”; Part No. AB-800T-X502 or approved equal.

### **CONSTRUCTION METHODS**

#### **801973-3.1**

Install equipment in accordance with manufacturer’s written instructions and approved submittals.

**METHOD OF MEASUREMENT**

**801973-4.1**

All work associated with the installation of all required control switches including all materials, equipment, labor and incidentals shall be measured per lump sum.

**BASIS OF PAYMENT**

**801973-5.1**

Payment for the control switches will be made at the contract unit price per lump sum. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

**ITEM AR801973      CONTROL SWITCHES – PER LUMP SUM.**

## **ITEM 801974 – FUMIGATION FACILITY RELOCATION**

### **DESCRIPTION**

#### **801974-1.1**

This item shall consist of the relocation of an existing fumigation facility and an associated support trailer. This work shall be performed at the start of construction. The site work for the new location specified herein and as shown on the plans shall be performed prior to removal of the fumigation facility and associated support structure from the existing location.

The removal consists of the following items:

- Disconnection of power from facility
- Removal of facility from existing PCC pad
- Removal of existing PCC pad
- Removal of associated support trailer
- Any other necessary items to fully remove the facility

The reinstallation consists of the following items:

- Drainage improvements including flared end section relocation, inlet installation and storm sewer pipe extension
- Grading of area
- Construction of bituminous access pad
- Construction of Portland cement concrete pad to support the relocated structures
- Installation of relocated structures on PCC pad
- Installation of PVC conduit and wiring from existing Utility pad mounted transformer to new Utility meter, Service Entrance Rated Load Center and to new fumigation facility locations
- Installation of new utility meter and load center in conformance with Plans and as required by serving utility, Ameren Illinois
- Connection of power to fumigation facility including new subpanel
- Anchoring of support trailer at new location
- Connection of power to support trailer

#### **801974-1.2**

All work associated with the removal work shall be paid for under the fumigation facility removal pay item.

#### **801974-1.3**

The following items will be paid for separately under their respective pay item.

- 3/C #2 600 V UG Cable – AR108602
- 3/C #6 600 V UG Cable – AR108606
- 2" PVC Duct, Direct Bury – AR110202
- Splice Can – AR125565
- Crushed Aggregate Base Course-9" – AR209609
- Bituminous Surface Course – AR401610
- Bituminous Base Course – AR403610
- Bituminous Prime Coat – AR602510
- Bituminous Tack Coat – AR605510

- Seeding – AR901510
- Mulching – AR908510

#### **801974-1.4**

All items required for the reinstallation of the existing fumigation facility and the existing associated support structure not listed in Item 800974-1.4 including the following shall be paid for under the fumigation facility installation pay item:

- Grading of area to the satisfaction of the Engineer
- Portland cement concrete pad
- Utility meter, load center, circuit breakers and conduit from Utility transformer to new Utility meter
- Any and all fees associated with a new power service from Ameren Illinois
- All wire located above ground including transition wire from below ground to above ground
- All GRS and PVC conduit located above ground including transition conduit from below ground to above ground
- GFCI receptacle
- Installation of fumigation facility on PCC pad
- Connection of electrical to fumigation facility including new subpanel
- Anchoring of support trailer at location shown on the plans
- Coordination with utility company
- All other work required to make facility operational

### **MATERIALS**

**801974-2.1 GENERAL.** Materials for items to be paid for under a separate item shall meet the material requirements for that item. All materials shall meet the requirements of “Buy American”.

**801974-2.2 CONCRETE.** Concrete shall conform to the requirements of Item 610.

**801974-2.3 CONDUIT.** Conduit shall conform to the requirements of Item 110.

**801974-2.4 UTILITY METER.** KWH meter shall conform to the requirements of Ameren Illinois.

**801974-2.5 GFCI RECEPTACLE.** The GFCI receptacle shall be a specification grade NEMA 5-20R receptacle, weather-resistant and corrosion-resistant, Pass & Seymour catalog no. 2095DSWRBK, or equivalent, mounted in a FS device box, with an extra deep, sunlight resistant, padlockable, polycarbonate construction weatherproof cover which complies with NEC Article 406.8B1, Taymac MM740C-B, or equivalent.

**801974-2.6 LOAD CENTER.** Load center shall be a service entrance rated load center, 100A, 120/240V, single-phase, 3-wire, in NEMA 3R enclosure, with 100A-2P main circuit breaker, two 50A-2P branch circuit breakers and one 20A-1P circuit breaker, Square D Type NQ, or equivalent and shall meet the requirements of “Buy American”.

**801974-2.6 SUBPANEL.** Subpanel installed in fumigation building shall be a UL listed load center, 100A, 120/240V, single-phase, 3-wire, Square D QO112M100, or equivalent with 50A-2P main circuit breaker, one 30A-2P branch circuit breaker, and two 20A-1P circuit breaker and shall meet the requirements of “Buy American”.

**801974-2.7 STRUT TYPE FRAMING.** Strut Type Framing shall be Unistrut P1000, or equivalent.

## **CONSTRUCTION METHODS**

### **801974-3.1**

Construction of items to be paid for under a separate item shall meet the construction requirements for that item. All other items shall be constructed using industry standards or as directed by the Engineer.

### **801974-3.2**

The Contractor shall carefully remove any items to be reused so as not to damage the items. Any item to be reused that is damaged by the Contractor shall be replaced at the Contractor's expense.

## **METHOD OF MEASUREMENT**

### **801974-4.1**

All work associated with the removal of the fumigation facility and associated support trailer including all labor, equipment, materials and all incidentals shall be measured per lump sum.

All work associated with the reinstallation of the existing fumigation facility and existing associated support trailer that is not paid for under a separate item including all labor, equipment, materials and all incidentals shall be measured per lump sum.

## **BASIS OF PAYMENT**

### **801974-5.1**

Payment for the removal of the fumigation facility and the associated support trailer will be made at the contract unit price per lump sum. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment for the reinstallation of the existing fumigation facility and the existing associated support trailer will be made at the contract unit price per lump sum. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment for items listed in Item 800974-1.3 will be paid for under the respective pay item.

Payment will be made under:

<b>ITEM AR801974</b>	<b>REMOVE FUMIGATION FACILITY – PER LUMP SUM.</b>
<b>ITEM AR801975</b>	<b>REINSTALL FUMIGATION FACILITY – PER LUMP SUM.</b>



## **ITEM 801976 – AIRCRAFT NOSE TETHER ANCHOR**

### **DESCRIPTION**

#### **801976-1.1**

This item shall consist of the installation of anchors installed flush with the pavement for attaching aircraft nose gear tether straps. The anchors shall be as shown on the plans and as specified herein.

### **MATERIALS**

#### **801976-2.1**

##### **A. Manufacturers**

1. Aviation Equipment International, Inc.; Mr. Dave Grant; (949) 364-0119
2. Williams Form Engineering Corp.; (616) 866-0815
3. Or approved equal.

- B. The prefabricated tie-down fit assembly with double hinge cover shall be Model 14370-105 with a 17 inch deep box as provided by Aviation Equipment International, Inc. or of an approved similar design. The anchor bracket assembly shall be a Williams Form galvanized anchor bracket assembly with welded anchor block with clevis pin and with two  $\frac{3}{4}$ "-10 NC galvanized anchor rods, or approved equal. Anchor rods may be substituted based on manufacturer's recommendations.

### **CONSTRUCTION METHODS**

#### **801976-3.1**

The anchors shall be installed as shown on the plans or as recommended by the manufacturer.

### **METHOD OF MEASUREMENT**

#### **801976-4.1**

The quantity of aircraft nose tether anchors to be paid for shall be the number of each anchor installed in conformance with the specifications and accepted by the Engineer.

### **BASIS OF PAYMENT**

#### **801976-5.1**

Payment shall be made at the contract unit price per each anchor installed in place by the Contractor and accepted by the Engineer. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

**ITEM AR801976      AIRCRAFT NOSE TETHER ANCHOR – PER EACH.**

**IDOT DIVISION OF AERONAUTICS POLICY MEMORANDA**

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**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** or **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](http://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.



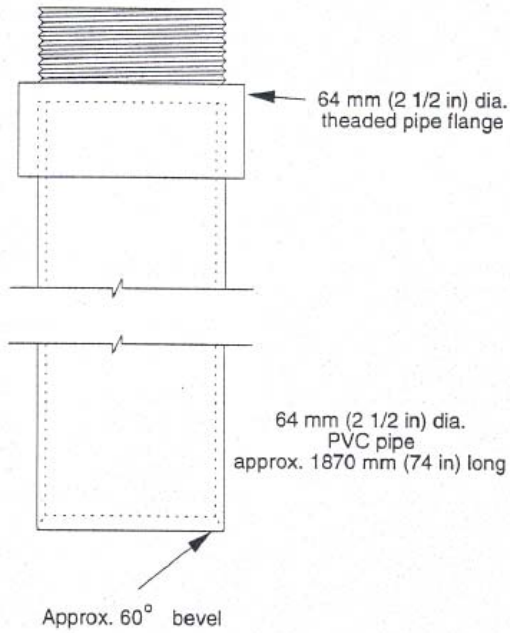
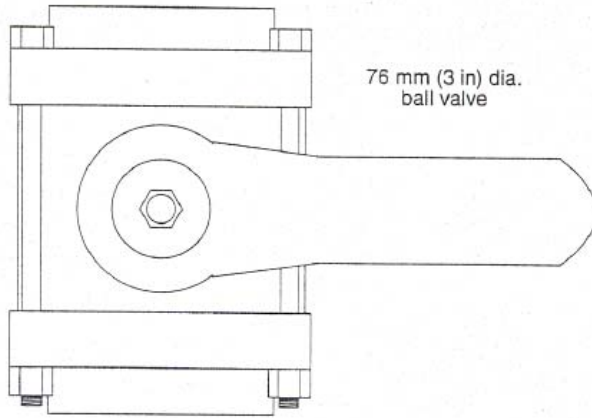
David L. Lippert, P.E.  
Acting Engineer of Materials  
and Physical Research

Attachment

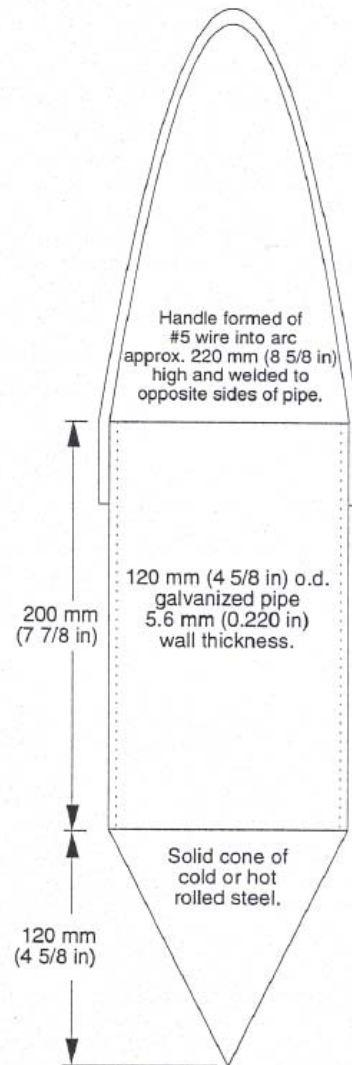
This policy memorandum supersedes Policy Memorandum 06-03 dated January 1, 2006.
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DAD/dt

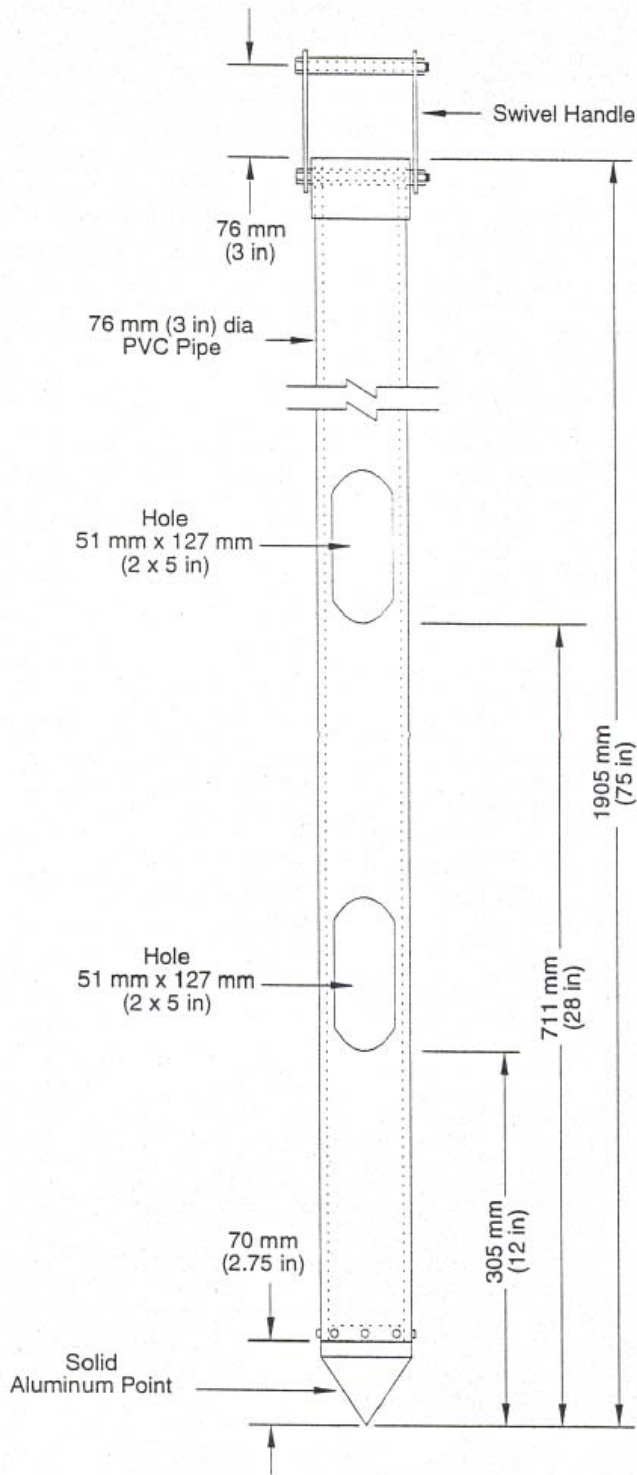
### Vacuum Type Bulk Cement Sampler



### 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  
Division of Aeronautics

POLICY MEMORANDUM

April 1, 2010

Springfield

Number: 87-2

TO: CONSULTING ENGINEERS

SUBJECT: DENSITY ACCEPTANCE OF BITUMINOUS PAVEMENTS

1. 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 ( $G_{sb}$ ) in accordance with ASTM D2726 using Procedure 9.1, "For Specimens That Contain Moisture". The Theoretical Maximum Gravity ( $G_{mm}$ ) shall be determined according to ASTM D2041, Procedure 7. 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.

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

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

### IV. Acceptance Calculations

The first step in calculating the quantities for pay is to calculate the Mean ( $\bar{x}$ ) and the Standard Deviation (S) of the Sublot tests. From this data the Lot samples should first be tested for outliers. After consideration for outliers, the Percent Within Tolerance (PWT) and the Percent Within Limits (PWL) are calculated to determine the final pay quantities for the Lot.

#### EXAMPLE

##### 1. Test Data

Lot Quantity = 2000 tons  
Sublot Test 1 = 4.35 % Air Voids  
Sublot Test 2 = 3.96 % Air Voids  
Sublot Test 3 = 6.75 % Air Voids  
Sublot Test 4 = 6.25 % Air Voids

##### 2. Calculating the Mean and Standard Deviation

Sublot	$\underline{x}$	$(\underline{x} - \bar{x})$	$(\underline{x} - \bar{x})^2$
1	4.35	- 0.978	0.956
2	3.96	- 1.368	1.871
3	6.75	1.422	2.022
4	<u>6.25</u>	0.922	<u>0.850</u>
Sum =	21.31		5.699

$$N = 4$$

$$\text{Mean}(\bar{x}) = 21.34 / 4 = 5.328$$



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

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

### 3. Test For Outliers

Check for Critical "T" Values

$$T = \frac{|(x_1 - \bar{x})|}{S} = \frac{|3.96 - 5.328|}{1.378} = 0.99$$

\* Difference between the suspect test value ( $x_1$ ) and the Mean ( $\bar{x}$ ).

If the T value exceeds the critical "T" Value in the table below and no assignable cause can be determined for the outlier, discard the suspected test measurement and obtain another random sample from the Sublot in question. If the new test exceeds the Mean ( $\bar{x}$ ) in the same direction from the Mean as the suspected test, recalculate the T value including all tests (original test, suspected test, and new test) for an outlier and for computing final payment.

#### TABLE OF CRITICAL "T" VALUES

Number of observations (N)	Critical "T" Value 5% Significance Level
3	1.15
4	1.46
5	1.67
6	1.82
7	1.94
8	2.03
9	2.11
10	2.18
11	2.23
12	2.29

Based on the above table, the "T" value of 0.99 does not exceed the Critical "T" Value of 1.46 for N = 4. Therefore, the value (3.96) is not an outlier and shall be used in calculating the Lot payment.

### 4. Calculation of Lot Payment

To calculate the Lot Payment use the Acceptance Criteria as outlined under Item 401-4.15(c) or Item 403-4.15(c).

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

$$Q_u = \frac{(7 - \bar{x})}{S} = \frac{7 - 5.328}{1.378} = 1.213$$

From this data the Percentage Within Tolerance (PWT) for both the lower and upper tolerance limits is determined by Table 6 (see Item 401 Bituminous Surface Course and/or Item 403 Bituminous Base Course in the Standard Specifications) for the number (N) of samples tested.

$$\begin{aligned} \text{Eq. PWT (lower)} &= 99.0\% \\ \text{PWT (upper)} &= 90.4\% \end{aligned}$$

We now calculate the Percent Within Limits (PWL) for the Lot.

$$\begin{aligned} \text{PWL} &= [\text{PWT (lower)}] + [\text{PWT (upper)}] - 100 \\ \text{PWL} &= (99.0 + 90.4) - 100 = 89.4\% \end{aligned}$$

Using Table 5, the % Adjustment in Lot Quantity is:

$$\begin{aligned} \% \text{ Adjustment} &= 0.5 \text{ PWL} + 55.0 \\ \% \text{ Adjustment} &= 0.5 (89.4) + 55.0 \\ \% \text{ Adjustment} &= 99.7 \end{aligned}$$

$$\begin{aligned} \text{Adjusted Quantities} &= \% \text{ Adjustment} \times \text{Lot Quantities} \\ \text{Adjusted Quantities} &= 0.997 \times 2000 \text{ tons} \\ \text{Adjusted Quantities} &= 1994 \text{ tons} \end{aligned}$$

#### 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 January 1, 2004.

State of Illinois  
Department of Transportation  
Division of Aeronautics

**POLICY MEMORANDUM**

April 1, 2010

Springfield

Number: **87-3**

TO: CONSULTING ENGINEERS

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 (IDOA) 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. When requested in writing by the contractor, the Engineer will recommend a preliminary mix design for evaluation at the Test Batch.

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. Whether the contractor selects his own mix design or chooses to use the mix design recommended by the Division, the contractor is responsible for the mix design, as well as the manufacture and placement of the mix.

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: 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  $6.0\% \pm 1.5\%$  and provides the required workability for paving, the contractor will make cylinders 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/cementitious 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  $6.0\% \pm 1.5\%$  air content. The water/cement ratio (or water/cementitious material) ratio cannot exceed 0.44 based on actual batch weights when 501-3.6(A) proportions is specified, and 0.42 when 501-3.6(B) proportions is specified.

- 4.) The Proportioning Technician shall complete Form AER M-7, Plastic Concrete Air, Slump and Quantity and Form AER M-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 are also acceptable test methods for the determination of aggregate moisture.
- 5.) The Resident Engineer and contractor shall each independently complete Form AER M-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 800 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 by the testing firm must perform his or her duties on a full time basis whenever concrete is produced for an IDOA project.

The proportioning technician shall perform the duties as outlined in the Division of Highways latest Manual of Instructions for Concrete Proportioning and Testing and as outlined as follows. These duties as outlined are not necessarily all inclusive and may include other duties as required by the specifications, special provisions, etc.

If a QC or QA test for slump, air content, or mix temperature fails to meet the requirements of the specifications the contractor shall reject the batch. In the case of a failing test of the air content, the contractor may make adjustments to the concrete to bring the air content into compliance with the specification. 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 the Division's Aggregate Certification of Compliance form, or supply the Resident Engineer with a certification letter indicating the stone quality and statement of non "D" cracking compliance.

- 2.) Inspect and maintain proper storage of all aggregates and materials daily.
- 3.) Perform at least one (1) 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 M-7, Concrete Air, Slump and Quantity, 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 visit the plant twice daily on a random basis to record actual batch weights and complete Form AER-4, Concrete Plant Production, Mix Verification. Forms AER-4, AER -7, and AER -12 shall be submitted to the R.E. on a daily basis and then faxed by the R.E. to the Division of Aeronautics daily. (FAX is (217) 558-1328)

#### V. ACCEPTANCE TESTING

As required by Item 501-5.3 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 subplot of the project shall be separated into an additional subplot if the concrete quantity is greater than or equal to 150.0 cubic yards. Otherwise, this remaining quantity shall be incorporated into the previous subplot.

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

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

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.

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

Supersedes Policy Memorandum 87-3, dated July 31, 2004.

State of Illinois  
Department of Transportation  
Division of Aeronautics

**POLICY MEMORANDUM**

January 1, 2004

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 ( $G_{sb}$ ) 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<sup>o</sup> F. Water baths should be maintained at this temperature throughout testing. Saturate the cores by submerging in the water for a minimum of 20 minutes.
4. With the balance and water bath properly assembled and zeroed, suspend the sample from the balance and submerge it in the water bath. The core must be placed with the original top and bottom in a vertical position. If necessary, add sufficient water to bring the water level up to the overflow outlet. Permit any excess to overflow. Read and record the Saturated Submerged Weight. Designate this weight as (C).
5. Remove the core from the water bath and blot the excess water from the surface of the core with an absorbent cloth or other suitable material. This must be done quickly to prevent the internal water from escaping.
6. Place the core on the balance and read and record the Saturated Surface-dry Weight in air. Designate this weight as (B).
7. Place the core in a tared pan and dry in an oven. When the core is dry, (less than 0.5 gm loss in one hour) record the weight and subtract the pan weight. Designate this weight as (A).

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

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

$G_{sb}$  = 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:

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

$G_{sb}$  = Bulk Specific Gravity  
 $G_{mm}$  = Theoretical Maximum Gravity\*

Note: The Theoretical Maximum Gravity ( $G_{mm}$ ) is determined from the mix design until current Vacuum Pycnometer test are available.

- F. PERCENT AIR. To calculate the percent air, use the following formula:

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

- G. WEIGHT PER SQUARE YARD OF COMPACTED MIXTURE. The actual weight per square yard of a compacted mixture can be calculated by using the Bulk Specific Gravity ( $G_{sb}$ ). The volume of a square yard of pavement one (1) inch thick is 0.75 cubic foot. Taking the weight of a cubic foot of water as 62.37 pounds, one square yard of compacted material, one (1) inch thick weighs:

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

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

Supersedes Policy Memorandum 87-4 effective January 1, 1994.

State of Illinois  
Department of Transportation  
Division of Aeronautics

**POLICY MEMORANDUM**

January 1, 2004

Springfield

Number: **90-1**

TO: CONSULTING ENGINEERS

SUBJECT: Resampling and Retesting of PCC Pavement

I. PURPOSE

1. 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.

1. 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 Engineer will select random locations from each SUBLLOT 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 C 42, 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 SUBLLOT shall be averaged to constitute one SUBLLOT 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 SUBLLOT shall be averaged to constitute one SUBLLOT sample. The SUBLLOT 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, 2001

**Illinois Department of Transportation  
Division of Aeronautics  
Materials Section**

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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

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**POLICY MEMORANDUM**

April 1, 2010

Springfield

Number 96-1

TO: CONSULTING ENGINEERS

SUBJECT: ITEM 610, STRUCTURAL PORTLAND CEMENT CONCRETE:  
JOB MIX FORMULA APPROVAL & PRODUCTION TESTING.

- I. This policy memorandum addresses the Job Mix Formula (JMF) approval process and production testing requirements when Item 610 is specified for an airport construction contract.
- II. PROCESS
  - a. The contractor may submit a mix design with recent substantiating test data or he may submit a mix design generated by the Illinois Division of Highways with recent substantiating test data for approval consideration. The mix design should be submitted to the Resident Engineer.
  - b. The Resident Engineer should verify that each component of the proposed mix meets the requirements set forth under Item 610 of the *Standard Specifications for Construction of Airports* and/or the contract special provisions.
  - c. The mix design should also indicate the following information:
    1. The name, address, and producer/supplier number for the concrete.
    2. The source, producer/supplier number, gradation, quality, and SSD weight for the proposed coarse and fine aggregates.
    3. The source, producer/supplier number, type, and weight of the proposed flyash and/or cement.
    4. The source, producer/supplier number, dosage rate or dosage of all admixtures.
  - d. After completion of Items b and c above, the mix with substantiating test data shall be forwarded to the Division of Aeronautics for approval. Once the mix has been approved, the production testing shall be at the rate in Section III as specified herein.

### III. PRODUCTION TESTING

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

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

Supersedes Policy Memorandum 96-1 dated January 1, 2004

State of Illinois  
Department of Transportation  
Division of Aeronautics

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**POLICY MEMORANDUM**

April 1, 2010

Springfield, Illinois

Number 96-2

TO: CONTRACTORS

SUBJECT: REQUIREMENTS FOR LABORATORY, TESTING, QUALITY CONTROL, AND PAVING OF  
HMA CONCRETE MIXTURES

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 (Hot Mix Asphalt) mixtures. References are made to the most recent issue of the Standard Specifications for Construction of Airports and to American Society for Testing and Materials (ASTM) testing methods. The Quality Assurance and acceptance responsibilities of the Resident Engineer/Consultant are described in Policy Memorandum 96-3.

II. LABORATORY

The Contractor shall provide a laboratory located at the plant and approved by the Illinois Division of Aeronautics (IDA). The laboratory shall be of sufficient size and be furnished with the necessary equipment and supplies for adequately and safely performing the Contractor's Quality Control testing as well as the Resident Engineer's acceptance testing as described in Policy Memorandum 96-3.

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

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

ASTM C 117	Test Method for Materials Finer than 75 µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C 566	Total Moisture Content of Aggregate by Drying
ASTM D 75	Sampling Aggregates
ASTM D 1559	Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus
ASTM D 2041	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D 2172	Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
IDOT	Ignition Method for Determining Asphalt Content

ASTM D 2726	Bulk Specific Gravity of Compacted Bituminous Mixtures using Saturated Surface Dry Specimens
ASTM D 3203	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D 2950	Density of Bituminous Concrete in Place by Nuclear Method
ASTM D 4125	Asphalt Content of Bituminous Mixtures by Nuclear Method
ASTM C 127	Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate
ASTM C 128	Standard Test Method for Specific Gravity and Absorption of Fine Aggregate

The Asphalt Institute's *Mix Design Methods for Asphalt Concrete Manual No. 2 (MS-2)*

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 Resident Engineer determines that the equipment is not within the limits of dimensions or calibration described in the appropriate test method, he may stop production until corrective action is taken. If laboratory equipment becomes inoperable or insufficient to keep up with mix production testing, the Contractor shall cease mix production until adequate and/or sufficient equipment is provided.

### III. MIX DESIGN SUBMITTAL

Based upon data and test results submitted by the Contractor, the Illinois Division of Aeronautics Engineer of Construction & Materials shall issue the final Job Mix Formula (JMF) approval letter that concurs or rejects the Contractor's proposed JMF. The Contractor will be required to perform the sampling and laboratory testing and develop a complete mix design, according to the following guidelines: [Note: A testing summary chart can be found in Appendix B.]

A. Material sources meeting the requirements of the contract shall be submitted in writing at or before the preconstruction conference (see BITUMINOUS WORKSHEET in Appendix A) in the following format:

1. To: Steven J. Long, P.E., Acting Chief Engineer  
Attn: Michael F. Wilhelm, P.E., Engineer of Construction & Materials  
Division of Aeronautics  
One Langhorne Bond Drive  
Springfield, Illinois 62707
2. Producer name and location of each aggregate
3. Producer # for each aggregate (producers are assigned this number by IDOT Central Bureau of Materials)
4. Material code for each aggregate
5. Gradation and Quality designation for each aggregate (i.e. CA-11, etc.)
6. Producer, producer #, and specific gravities of asphalt cement

7. Performance Graded Binder 64-22 shall be used unless otherwise approved by the IDA Engineer of Construction & Materials.
- B. The Contractor shall obtain representative samples of each aggregate. The individual obtaining samples shall have successfully completed the IDOT Aggregate Technician Course under the IDOT Division of Highways, QC/QA program. The sample size shall be approximately 280 lb. for each coarse aggregate, 150 lb. for each fine aggregate, 15 lb. for the mineral filler or collected dust, and 1 gallon of asphalt cement.
- C. The Contractor shall split the aggregate samples down and run gradation tests according to the testing methods referenced in Appendix B of this memorandum. The remaining aggregates shall be set aside for further Mix Design testing. The results of the gradation tests, along with the most recent stockpile gradations, shall be reported by fax to the IDA Engineer of Construction & Materials for engineering evaluation. If the gradation results are deemed non-representative or in any way unacceptable, new representative samples may be required at the direction of the IDA Engineer of Construction & Materials. Only composite gradations are required under this procedure.
- D. Based on the accepted gradation results, the Contractor will determine blend percentages in accordance with the contract specifications (see Section 401/403 – 3.2 JOB MIX FORMULA under Table 4) for each aggregate to be used in determining the Job Mix Formula, as well as mix temperature and asphalt content(s), and number of Marshall Blows for preparation of the Marshall Mix Design or number of gyrations for Superpave Mix Design, depending on which design is specified in the contract. The Contractor will verify the aggregate percentages, mix temperatures, asphalt content(s), and number of Marshall blows (or gyrations) with the IDA Engineer of Construction & Materials before beginning any testing.
- E. After verification of the information from step D., the Contractor shall make specimens and perform the following tests at various asphalt contents in order to obtain the optimum mix design. [Note: Actual test designation is referenced in Appendix B of this memorandum.]

**Marshall Tests**

Maximum Specific Gravity -- " $G_{mm}$ "

Bulk Specific Gravity -- " $G_{sb}$ "

Marshall Stability

Marshall Flow

% air voids

- The JMF will be designed in accordance with Table 2 as modified in Section 401 – 3.2 or 403 – 3.2, depending on the type of mix being produced. Appendix C contains a copy of the Table 2 targets and ranges for the JMF.
- F. All technicians who will be performing mix design testing and plant sampling/testing shall have successfully completed the IDOT Division of Highways HMA Concrete Level 1 Technician Course "HMA Concrete Testing". The Contractor may also provide a Gradation Technician who has successfully completed the Department's "Gradation Technician Course" to run gradation tests only under the supervision of a HMA Concrete Level 2 Technician.
- G. The mix design testing results and resulting optimal JMF shall be reported to the IDA Engineer of Construction & Materials with the following data included:
- a) Aggregate & liquid asphalt material codes
  - b) Aggregate & liquid asphalt producer numbers, names, and locations
  - c) Aggregate Blend of each aggregate
  - d) Optimum Blend % for each sieve
  - e) AC Specific Gravity
  - f) Bulk Specific Gravity and Absorption for each aggregate

- g) Summary of Marshall Design Data: AC % Mix, Stability, Flow,  $G_{mb}$ ,  $G_{mm}$ , VMA, Voids (Total Mix), Voids Filled
- h) Optimum design data listing AC % Mix, Stability, Flow,  $G_{mb}$ ,  $G_{mm}$ , VMA, Voids (Total Mix), Voids Filled
- 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. Stability, AC vs. Flow and VMA

- H. The IDA Engineer of Construction & Materials shall generate and issue a concurrence or rejection of the Contractor's proposed Mix Design with the JMF for the manufacture of HMA mixtures based upon the Contractor's submitted testing and complete mix design results. The Contractor shall not be permitted to use the proposed HMA mix in production for the project until this concurrence letter is issued to the Contractor by the IDA Engineer of Construction & Materials, and the mix passes all test section requirements, when a test section is specified.
- I. The above procedure, III. MIX DESIGN SUBMITTAL shall be repeated for each change in source or gradation of materials.

#### IV. MIX PRODUCTION TESTING

The Quality Control of the manufacture and placement of HMA mixtures is the responsibility of the Contractor. The Contractor shall perform or have performed the inspection and tests required to assure conformance to contract requirements. Quality Control includes the recognition of defects and their immediate correction. This may require increased testing, communication of test results to the plant or the job site, modification of operations, suspension of HMA mix production, rejection of material, or other actions as appropriate. The Resident Engineer shall be immediately notified of any failing tests and subsequent remedial action. Form AER M-14 shall be reported to the Engineer and Resident Engineer no later than the start of the next work day. In addition, AER M-9 and M-11 shall be given to the Resident Engineer daily. 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 Concrete 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. The following plant tests and documentation shall be required: [Note: A summary chart of testing can be found in Appendix B.]

- A. Minimum of one (1) complete hot bin or combined belt analysis per day of production or every 1,000 tons, whichever is more frequent.
- B. Minimum one (1) stockpile gradation for each aggregate and/or mineral filler per week when a batch plant is utilized. Minimum of one (1) gradation for each aggregate per day of production or every 1,000 tons when a drum plant is used, and one (1) gradation per week for mineral filler when a drum plant is used.
- C. A certification from the quarry for the total quantity of aggregate listing the source, gradation type, and quality designation of aggregate shipped.
- D. Original asphalt shipping tickets listing the source and type of asphalt shipped.
- E. One mix sample per 1,000 tons of mix. The sample shall be split in half. One half shall be reserved for testing by the Engineer. The other half shall be split and tested by the Contractor for Marshall, Extraction, Gradation, Maximum Specific Gravity, and Air Void tests in accordance with the appropriate ASTM standard referenced herein. [See Appendix B.]
  - 1. In place of the extraction test, the Contractor may provide the asphalt content by a calibrated ignition oven test using the IDOT Division of Highways' latest procedure. The

correction (calibration) factor for aggregate type shall be clearly indicated in the reported test results.

From these tests, the Contractor shall interpret the test data and make necessary adjustments to the production process in order to comply with the approved JMF.

V. QUALITY CONTROL

A. Control Limits

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

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

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

B. Control Charts

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

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

The following parameters shall be recorded on control charts:

1. Combined Gradation of Hot-Bin or Combined Belt Aggregate Samples (Drier Drum). (% Passing 1/2 in., No. 4., No. 8, No. 30, and No. 200 Sieves)
2. Asphalt Content
3. Bulk Specific Gravity of Marshall Sample
4. Maximum Specific Gravity of Mixture

C. Corrective Action for Required Plant Tests

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

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

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

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

The Contractor shall notify the Engineer whenever the moving average values exceed the moving average control limits. If two consecutive moving average values fall outside the moving average control limits, the Contractor shall cease operations. Corrective action shall be immediately instituted by the Contractor. Operations shall not be reinstated without the approval of the Engineer. Failure to cease operations shall subject all subsequently produced material to be considered unacceptable.
  - b. Mix Production Control. If the Contractor is not controlling the production process and is making no effort to take corrective action, the operation shall stop.

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

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

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



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

1. High Density in the Growth Curve. If the growth curve indicates a maximum achievable field density of between 95 to 98 percent of the Theoretical Maximum Density (D), you can proceed with the Rolling Pattern. On the other hand, if the maximum achievable density is greater than 98 percent, a quick evaluation (by use of an extractor, hot bin gradations, nuclear asphalt determinator, etc.) must be made of the mix. When adjustments are made in the mix, a new growth curve shall be constructed.
2. Low Density in the Growth Curve. If the growth curve indicates the maximum achievable density is below 94 percent, a thorough evaluation of the mix, rollers, and laydown operations should be made. After a thorough evaluation of all factors (mix, rollers, etc.), asphalt or gradation changes may be in order as directed by the Engineer. Again, any changes in the mix will require a new growth curve. Note that the nuclear density test is a quality control tool and not an acceptance test. All acceptance testing is to be conducted by the use of cores, unless otherwise specified.
3. Acceptance of Test Section. The Contractor may proceed with paving the day after the test section provided the following criteria have been met:
  - a. Four random locations (2 cores per location cut longitudinally and cored by the Contractor) will be selected by the Engineer within the test strip. No individual core can be below a minimum of 94% density.
  - b. All Marshall and extraction test results from mix produced for the test section must be within the tolerances required by specification.
  - c. The Contractor shall correlate his nuclear gauge to the cores taken in the test section. Additional cores may be taken at the Contractor's expense for this purpose within the test section area, when approved by the Engineer.
4. Density Acceptance under Production Paving. The responsibility for obtaining the specified density lies with the Contractor. Therefore, it is important that the nuclear density gauge operator communicate with the roller operators to maintain the specified density requirements. The Contractor shall provide a qualified HMA Density Tester who has successfully completed the Department's "HMA Concrete Nuclear Density Testing Course" to run all required density tests on the job site. Density acceptance testing, unless otherwise specified, is described as follows:
  - a. The Contractor shall cut cores at random locations within 500 ton sublots as directed by the Resident Engineer.
  - b. The cores should be extracted so as not to damage them, since they are used to calculate the Contractor's pay.
  - c. The Resident Engineer will run preliminary  $G_{mb}$  tests on the cores to give the Contractor an indication of how compaction is running for the next day's paving.

- d. A running average of four (4) Maximum Theoretical Gravities ( $G_{mm}$ ) will be used for calculating percent compaction.
- e. Final core density tests and pay calculations will be performed by the Resident Engineer and delivered to the Contractor.

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

Supersedes Policy Memorandum 96-2 dated January 16, 2007.

# **APPENDIX A**

# BITUMINOUS WORKSHEET

Airport: \_\_\_\_\_ Project No.: \_\_\_\_\_ AIP No.: \_\_\_\_\_

Mix Design #: \_\_\_\_\_ Material Code: \_\_\_\_\_ Producer: \_\_\_\_\_  
Prod. #: \_\_\_\_\_

## AGGREGATE

Mat'l. Code: \_\_\_\_\_

Producer #: \_\_\_\_\_

Prod. Name \_\_\_\_\_

Location: \_\_\_\_\_

## Percent Passing

### Sieve Size

1 inch \_\_\_\_\_

3/4 inch \_\_\_\_\_

1/2 inch \_\_\_\_\_

3/8 inch \_\_\_\_\_

No. 4 \_\_\_\_\_

No. 8 \_\_\_\_\_

No. 16 \_\_\_\_\_

No. 30 \_\_\_\_\_

No. 50 \_\_\_\_\_

No. 100 \_\_\_\_\_

No. 200 \_\_\_\_\_

Washed (y/n) \_\_\_\_\_

O.D. Gravity \_\_\_\_\_

App. Gravity \_\_\_\_\_

Absorption \_\_\_\_\_

Asphalt Gravity \_\_\_\_\_ Asphalt Source \_\_\_\_\_ Asphalt Producer No. \_\_\_\_\_

## MARSHALL DATA

% Asphalt \_\_\_\_\_

M. Stability \_\_\_\_\_

Flow \_\_\_\_\_

D \_\_\_\_\_

d \_\_\_\_\_

% Air Voids \_\_\_\_\_

Q.C. Manager Name: \_\_\_\_\_ Phone number: \_\_\_\_\_

Laboratory Location: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Remarks: \_\_\_\_\_

# **APPENDIX B**

**QUALITY CONTROL TESTING (PLANT)**

<b>PARAMETER</b>	<b>FREQUENCY</b>	<b>SAMPLE SIZE</b>	<b>TEST METHOD</b>	<b>REPORT FORM</b>
Aggregate Gradations: Hot bins for batch and continuous plants--- Individual cold-feeds or combined belt-feeds for drier drum plants.	Minimum 1 per day of production and at least 1 per 1000 tons.	CA07/11: 5000 gm CA13: 2000 gm CA16: 1500 gm Fine agg: 500 gm 1 gallon asphalt cement	ASTM C 136	AER M-9
Aggregate gradations: Stockpiles	Minimum 1 per aggregate per week per stockpile.	CA07/11: 5000 gm CA13: 2000 gm CA16: 1500 gm Fine agg: 500 gm *Note: The above test sample sizes are to be obtained from splitting down a larger sample from the stockpiles.	ASTM C 136	AER M-9
Maximum Specific Gravity	Minimum 1 per 1000 tons	1200 gm per test	ASTM D 2041	AER M-11 and AERM-14
Bulk Specific Gravity	Minimum 1 per 1000 tons	1250 gm per briquette	ASTM D 2726	AER M-11 and AERM-14
Marshall Stability and Flow	Minimum 1 per 1000 tons	1250 gm per briquette	ASTM D 1559	AER M-11 and AERM-14
% Air Voids	Minimum 1 per 1000 tons		ASTM D 3203	AER M-11 and AERM-14
Extraction	Minimum 1 per 1000 tons	1000 gm (surface) 1500 gm (base)	ASTM D 2172	AER M-11 and AERM-14
Ignition Oven Test	Minimum 1 per 1000 tons	1500 gm		AER M-14
Nuclear Asphalt Gauge	Minimum 1 per 1000 tons	1000-1100 gm	ASTM D 2145	AER M-14

**MIX DESIGN TESTING**

<b>PARAMETER</b>	<b>FREQUENCY</b>	<b>SAMPLE SIZE</b>	<b>TEST METHOD</b>	<b>REPORT FORM</b>
Representative samples of each aggregate and asphalt cement.	1 per aggregate and 1 asphalt cement.	280 lb. (coarse) 150 lb. (fine) 15 lb. (min. filler) 1 gallon asphalt cement	ASTM D 75	N/A
Aggregate Gradation	1 per aggregate	CA07/11: 5000 gm CA13: 2000 gm CA16: 1500 gm Fine agg: 500 gm	ASTM C 136	Bituminous Worksheet (Appendix A)
Maximum Specific Gravity	2 per specified asphalt content	1200 gm per test	ASTM D 2041	Bituminous Worksheet (Appendix A)
Bulk Specific Gravity	3 briquettes per specified asphalt content	1250 gm per briquette	ASTM D 2726	Bituminous Worksheet (Appendix A)
Marshall Stability and Flow	3 briquettes	1250 gm per briquette	ASTM D 1559	Bituminous Worksheet (Appendix A)
% Air Voids	1 per specified asphalt content (Avg. of $G_{sb}/G_{mm}$ )		ASTM D 3203	Bituminous Worksheet (Appendix A)

**QUALITY CONTROL TESTING (PAVER)**

<b>PARAMETER</b>	<b>FREQUENCY</b>	<b>SAMPLE SIZE</b>	<b>TEST METHOD</b>	<b>REPORT FORM</b>
Nuclear Density Test	As required by the Contractor to maintain consistent passing density	Various locations	ASTM D 2950	



# APPENDIX C

**AGGREGATE HMA BASE COURSE**

<b>Percentage by Weight Passing Sieves Job Mix Formula (JMF)</b>		
<b>Sieve Size</b>	<b>Gradation B Range 1" Maximum</b>	<b>Ideal Target</b>
1-1/4 in.	---	---
1 in.	100	100
3/4 in.	93 – 97	95
1/2 in.	75 – 79	77
3/8 in.	64 – 68	66
No. 4	45 – 51	48
No. 8	34 – 40	37
No. 16	27 – 33	30
No. 30	19 – 23	21
No. 100	6 – 10	8
No. 200	4 – 6	5
<b>Bitumen %:</b>		
<b>Stone</b>	<b>4.5 – 7.0</b>	<b>5.5</b>

**AGGREGATE HMA SURFACE COURSE**

<b>Percentage by Weight Passing Sieves Job Mix Formula (JMF)</b>		
<b>Sieve Size</b>	<b>Gradation B Range <sup>3</sup>/<sub>4</sub>" Maximum</b>	<b>Ideal Target</b>
1 in.	100	---
3/4 in.	100	100
1/2 in.	99 - 100	100
3/8 in.	91 - 97	94
No. 4	56 - 62	59
No. 8	36 - 42	39
No. 16	27 - 32	30
No. 30	19 - 25	22
No. 100	7 - 9	8
No. 200	5 - 7	6
<b>Bitumen %: Stone</b>	<b>5.0 - 7.0</b>	<b>6.0</b>

State of Illinois  
Department of Transportation  
Division of Aeronautics

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**POLICY MEMORANDUM**

January 1, 2004

Springfield, Illinois

Number 96-3

TO: CONSULTING ENGINEERS

SUBJECT: REQUIREMENTS FOR QUALITY ASSURANCE ON PROJECTS  
WITH BITUMINOUS CONCRETE PAVING

I. SCOPE

The purpose of this policy memorandum is to define to the Consulting Engineer the requirements concerning Quality Assurance on bituminous concrete paving projects. Specifically, this memo applies whenever the Contractor is required to comply with the requirements set forth in Policy Memorandum 96-2, "*Requirements for Laboratory, Testing, Quality Control, and Paving of Bituminous Concrete Mixtures*".

II. LABORATORY APPROVAL

The Resident Engineer shall review and approve the Contractor's plant laboratory to assure that it meets the requirements set forth in the contract specifications and Policy Memorandum 96-2. This review and approval shall be completed prior to utilization of the plant for the production of any mix.

III. QUALITY ASSURANCE DURING PRODUCTION PAVING

A. At the option of the Engineer, independent assurance tests may be performed on split samples taken by the Contractor for Quality Control testing. In addition, the Resident Engineer shall witness the sampling and splitting of these samples at the start of production and as needed throughout mix production. The Engineer may select any or all split samples for assurance testing. These tests may be performed at any time after sampling. The test results will be made available to the Contractor as soon as they become available.

B. The Resident Engineer may witness the sampling and testing being performed by the Contractor. If the Resident Engineer determines that the sampling and Quality Control tests are not being performed according to the applicable test procedures, the Engineer may stop production until corrective action is taken. The Resident Engineer will promptly notify the Contractor, both verbally and in writing, of observed deficiencies. The Resident Engineer will document all witnessed samples and tests. The Resident Engineer may elect to obtain samples for testing, separate from the Contractor's Quality Control process, to verify specification compliance.

1. Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits:

<u>Test Parameter</u>	<u>Acceptable Limits of Precision</u>
% Passing	
1/2 in.	5.0 %
No. 4	5.0 %
No. 8	3.0 %
No. 30	2.0 %
No. 200	2.2 %
Asphalt Content	0.3 %
Maximum Specific Gravity of Mixture	0.026
Bulk Specific Gravity of Marshall Sample	0.045

2. In the event a comparison of the required plant test results is outside the above acceptable limits of precision, split or independent samples fail the control limits, an extraction indicates non-specification mix, or a continual trend of difference between Contractor and Engineer test results is identified, the Engineer will immediately investigate. The Engineer may suspend production while the investigation is in progress. The investigation may include testing by the Engineer of any remaining split samples or a comparison of split sample test results on the mix currently being produced. The investigation may also include review and observation of the Contractor's technician performance, testing procedure, and equipment. If a problem is identified with the mix, the Contractor shall take immediate corrective action. After corrective action, both the Contractor and the Engineer shall immediately resample and retest.

- C. The Contractor shall be responsible for documenting all observations, records of inspection, adjustments to the mixture, test results, retest results, and corrective actions in a bound hardback field book or bound diary which will become the property of IDA upon completion and acceptance of the project. The Contractor shall be responsible for the maintenance of all permanent records whether obtained by the Contractor, the Contractor's Consultants, or the producer of bituminous mix material. The Contractor shall provide the Engineer full access to all documentation throughout the progress of the work.

Results of adjustments to mixture production and tests shall be recorded in duplicate and sent to the Engineer.

#### IV. ACCEPTANCE BY ENGINEER

Density acceptance shall be performed according to Policy Memorandum 87-2, or according to the acceptance procedure outlined in the Special Provisions.

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

Supersedes Policy Memorandum 96-3 dated January 1, 1997

State of Illinois  
Department of Transportation  
Division of Aeronautics

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**POLICY MEMORANDUM**

January 1, 2004

Springfield, Illinois

Number 97-2

TO: CONSULTING ENGINEERS

SUBJECT: PAVEMENT MARKING PAINT ACCEPTANCE

I. SCOPE

The purpose of this policy memorandum is to define the procedure for acceptance of pavement marking paint.

II. RESIDENT ENGINEER'S DUTIES

The Resident Engineer shall follow the acceptance procedure outlined as follows:

- A. Require the painting contractor to furnish the name of the paint manufacturer and the batch 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 so that the paint will not be contaminated. It is important to seal the sample container immediately with a tight cover 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 within 24 hours after sampling. Address the samples to the Materials 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. Take the paint sample from the spray nozzle when the contractor begins marking. A sample consists of two one-pint cans taken per batch number.
  - 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.

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

Supersedes policy memorandum 97-2 dated February 27, 2002



State of Illinois  
Department of Transportation  
Division of Aeronautics

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**POLICY MEMORANDUM**

January 1, 2004	Springfield, Illinois	Number: 2001-1
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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 be in compliance 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

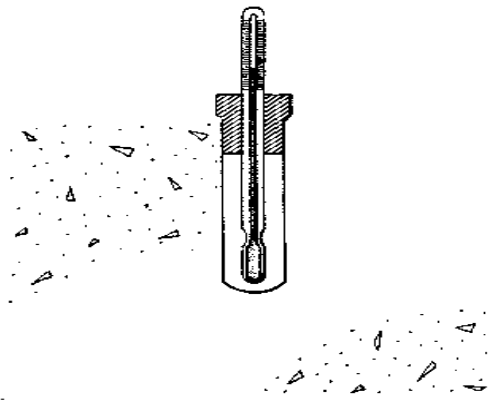
1. Paving or placing concrete on a frozen base, subbase, or subgrade is prohibited.
2. The base, subbase, or subgrade on which the concrete is to be placed shall be thawed and heated to at least 40°F. The method by which the base subbase or subgrade is to be heated shall be indicated in the contractor's 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 501-3.17 (a) (b), (c), and (d) 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 10 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<sup>2</sup>/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 (10 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.

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

Supersedes Policy Memorandum 2001-1 dated January 1, 2001

# 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 <sup>2</sup> -F/Btu (m <sup>2</sup> -K/W), is used			
	R = 2 (0.35)	R = 4 (0.70)	R = 6 (1.06)	R = 8 (1.41)
Cement content = 300 lb/yd <sup>2</sup> (178 kg/m <sup>2</sup> )				
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/yd <sup>2</sup> (237 kg/m <sup>2</sup> )				
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/yd <sup>2</sup> (296 kg/m <sup>2</sup> )				
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/yd <sup>2</sup> (356 kg/m <sup>2</sup> )				
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 <sup>2</sup> -F/Btu (m <sup>2</sup> -K/W), is used			
	R = 2 (0.35)	R = 4 (0.70)	R = 6 (1.06)	R = 8 (1.41)
Cement content = 300 lb/yd <sup>2</sup> (178 kg/m <sup>2</sup> )				
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/yd <sup>2</sup> (237 kg/m <sup>2</sup> )				
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/yd <sup>2</sup> (296 kg/m <sup>2</sup> )				
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/yd <sup>2</sup> (356 kg/m <sup>2</sup> )				
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-ft <sup>2</sup> -F / Btu	10 mm, m <sup>2</sup> -K / W
<b>Boards and slabs</b>		
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
<b>Blanket</b>		
Mineral fiber, fibrous form processed from rock, slag, or glass	3.23	0.224
<b>Loose fill</b>		
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.



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**STORM WATER POLLUTION PREVENTION PLAN**

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Storm Water Pollution Prevention Plan

Route \_\_\_\_\_
Section MidAmerica St. Louis Airport
County St. Clair

Marked Rte. \_\_\_\_\_
Project No. BLV-4061
Contract No. SC066

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name
Title
Agency

Signature
Date

I. Site Description:

- A. Provide a description of the project location (include latitude and longitude):
Mid America Airport, St. Clair County, IL.
Latitude: 38°32'43" N
Longitude: 89°50'7" W
B. Provide a description of the construction activity which is the subject of this plan:
Construct 300' x 430' apron expansion adjacent to existing Mike Apron.
C. Provide the estimated duration of this project:
130 calendar days
D. The total area of the construction site is estimated to be 9 acres.
The total area of the site estimated to be disturbed by excavation, grading or other activities is 9 acres.
E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
c = 0.56
F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:
491B2 (Ruma Silt Loam). 2%-5% slopes with moderate erosivity.
217A (Marine Silt Loam). 2%-5% slopes with moderate erosivity.
G. Identify any hydric soils onsite, and provide an estimate of the number of acres that will likely be disturbed:
None.

H. Provide a description of potentially erosive areas associated with this project:

Vegetated ditch side slopes have potential to erode. Erosion control blankets are called out to prevent this.

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

Excavation for apron expansion, relocation of ditch

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

St. Clair County

L. The following is a list of receiving water(s) and the ultimate receiving water(s), and aerial extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:

Silver Creek

M. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

N. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed Receiving Waters
- Receiving Waters with Total Maximum Daily Load (TMDL)
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed Receiving Waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

Silver Springs Creek. Pollutants are manganese, sedimentation/siltation and phosphorus (total).

b. A description of how Erosion and Sediment Control Practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a 25-year, 24-hour rainfall event, if the receiving water is listed as impaired for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation):

Silt fence and ditch checks will collect sediment prior to it leaving the site. Permanent seeding, hydromulch and erosion control blankets will stabilize the disturbed area and prevent erosion.

c. If pollutants other than sediment are identified as causing the impairment, provide a description of how Pollution Prevention BMPs will be incorporated into the site design to prevent their discharge.

On-site vegetated ditches provide an opportunity for water filtration. Stabilizing these ditches also reduces the chance for erosion of the slopes, thus reducing the amount of phosphorus released to Silver Creek.

d. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

Existing outlet structure at the southeast corner of the detention basin will remain in use.

e. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

Any dewatering shall be filtered through a BMP (filter sock, check dam), prior to being released to Silver Creek.

2. TMDL (fill out this section if checked above)

a. The name(s) of the listed water body:

N/A

b. Provide a description of the Erosion and Sediment Control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

N/A

c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

N/A

O. The following pollutants of concern will be associated with this construction project:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment             | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete                  | <input type="checkbox"/> Antifreeze / Coolants   |
| <input checked="" type="checkbox"/> Concrete Truck Waste      | <input type="checkbox"/> Waste water from cleaning construction equipment                          |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify)   |
| <input type="checkbox"/> Solid Waste Debris                   | <input type="checkbox"/> Other (specify)   |
| <input checked="" type="checkbox"/> Paints                    | <input type="checkbox"/> Other (specify)   |
| <input type="checkbox"/> Solvents                             | <input type="checkbox"/> Other (specify)   |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides  | <input type="checkbox"/> Other (specify)   |

**II. Controls:**

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the contractor will be responsible for its implementation as indicated. The contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the permit. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls

1. **Stabilized Practices:** Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of 14 or more calendar days.

Where the initiation of stabilization measures by the 7<sup>th</sup> day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following Stabilization Practices will be used for this project:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips                      | <input checked="" type="checkbox"/> Sodding                            |
| <input type="checkbox"/> Protection of Trees                          | <input type="checkbox"/> Geotextiles                                   |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input checked="" type="checkbox"/> Other (specify) Silt Fence         |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7)            | <input checked="" type="checkbox"/> Other (specify) Ditch Checks       |
| <input checked="" type="checkbox"/> Temporary Mulching                | <input type="checkbox"/> Other (specify)                               |
| <input checked="" type="checkbox"/> Permanent Seeding                 | <input type="checkbox"/> Other (specify)                               |

Describe how the Stabilization Practices listed above will be utilized during construction:

Silt fence and ditch checks will capture the sediment prior to it leaving the sit. Temporary mulching, seeding, hydromulching and erosion control blankets will preven erosion from occuring.

Describe how the Stabilization Practices listed above will be utilized after construction activities have been completed:

Preservation of mature vegetation will decrease the amount of disturbed ground, therefore, reducing the potential for erosion. Sod and permanent seeding will stabilized ground that was disturbed, thus preventing these areas from future erosion.

2. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following Structural Practices will be used for this project:

- |  |  |
|--|--|
| <input type="checkbox"/> Perimeter Erosion Barrier               | <input checked="" type="checkbox"/> Rock Outlet Protection |
| <input checked="" type="checkbox"/> Temporary Ditch Check        | <input checked="" type="checkbox"/> Riprap                 |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions                           |
| <input type="checkbox"/> Sediment Trap                           | <input type="checkbox"/> Slope Mattress                    |
| <input type="checkbox"/> Temporary Pipe Slope Drain              | <input type="checkbox"/> Retaining Walls                   |
| <input type="checkbox"/> Temporary Sediment Basin                | <input type="checkbox"/> Slope Walls                       |
| <input type="checkbox"/> Temporary Stream Crossing               | <input type="checkbox"/> Concrete Revetment Mats           |
| <input type="checkbox"/> Stabilized Construction Exits           | <input type="checkbox"/> Level Spreaders                   |
| <input type="checkbox"/> Turf Reinforcement Mats                 | <input type="checkbox"/> Other (specify)                   |
| <input type="checkbox"/> Permanent Check Dams                    | <input type="checkbox"/> Other (specify)                   |
| <input type="checkbox"/> Permanent Sediment Basin                | <input type="checkbox"/> Other (specify)                   |
| <input type="checkbox"/> Aggregate Ditch                         | <input type="checkbox"/> Other (specify)                   |
| <input type="checkbox"/> Paved Ditch                             | <input type="checkbox"/> Other (specify)                   |

Describe how the Structural Practices listed above will be utilized during construction:

The ditch checks and silt fence will capture the silt prior to it leaving the site.

Describe how the Structural Practices listed above will be utilized after construction activities have been completed:

Rip rap and rock outlet protection will prevent erosion from occuring.

3. **Storm Water Management:** Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

- b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls:

The existing storm water management controls will continue to be utilized after construction. This includes the large dry bottom detention basin and outlet structure.

4. **Approved State or Local Laws:** The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

N/A

5. **Contractor Required Submittals**

- a. Contractor is to provide a Construction Schedule containing an adequate level of detail to show major activities with implementation of Pollution Prevention BMPs, including the following items:
- Approximate duration of the project, including each stage of the project
  - Rainy season, dry season, and winter shutdown dates
  - Temporary stabilization measures to be employed by contract phases
  - Mobilization timeframe
  - Mass clearing and grubbing/roadside clearing dates
  - Deployment of Erosion Control Practices
  - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
  - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
  - Paving, saw-cutting, and any other pavement related operations
  - Major planned stockpiling operations
  - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
  - Permanent stabilization activities for each area of the project
- b. Contractor is to provide a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
  - Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
  - Stockpile Management – Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
  - Waste Disposal – Discuss methods of waste disposal that will be used for this project.
  - Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
  - Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
  - Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
  - Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.

**III. Maintenance:**

The Resident Engineer will provide maintenance guides to the contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan.



#### **IV. Inspections:**

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using the Department's Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inch or greater or equivalent snowfall.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: [epa.swnoncomp@illinois.gov](mailto:epa.swnoncomp@illinois.gov), telephone or fax within 24 hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Noncompliance" (ION) report for the identified violation within 5 days of the incident. The Resident Engineer shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Compliance Assurance Section  
1021 North Grand East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

#### **V. Failure to Comply:**

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed on to the contractor.



The Resident Engineer is to make copies of this form and every contractor and sub-contractor will be required to complete their own separate form.

Route	_____	Marked Rte.	_____
Section	<u>MidAmerica St. Louis Airport</u>	Project No.	<u>BLV-4061</u>
County	<u>St. Clair</u>	Contract No.	<u>SC066</u>

This certification statement is part of the Storm Water Pollution Prevention Plan for the project described above, in accordance with General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in the Storm Water Pollution Prevention Plan for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the ILR10 and Storm Water Pollution Prevention Plan and will provide timely updates to these documents as necessary.

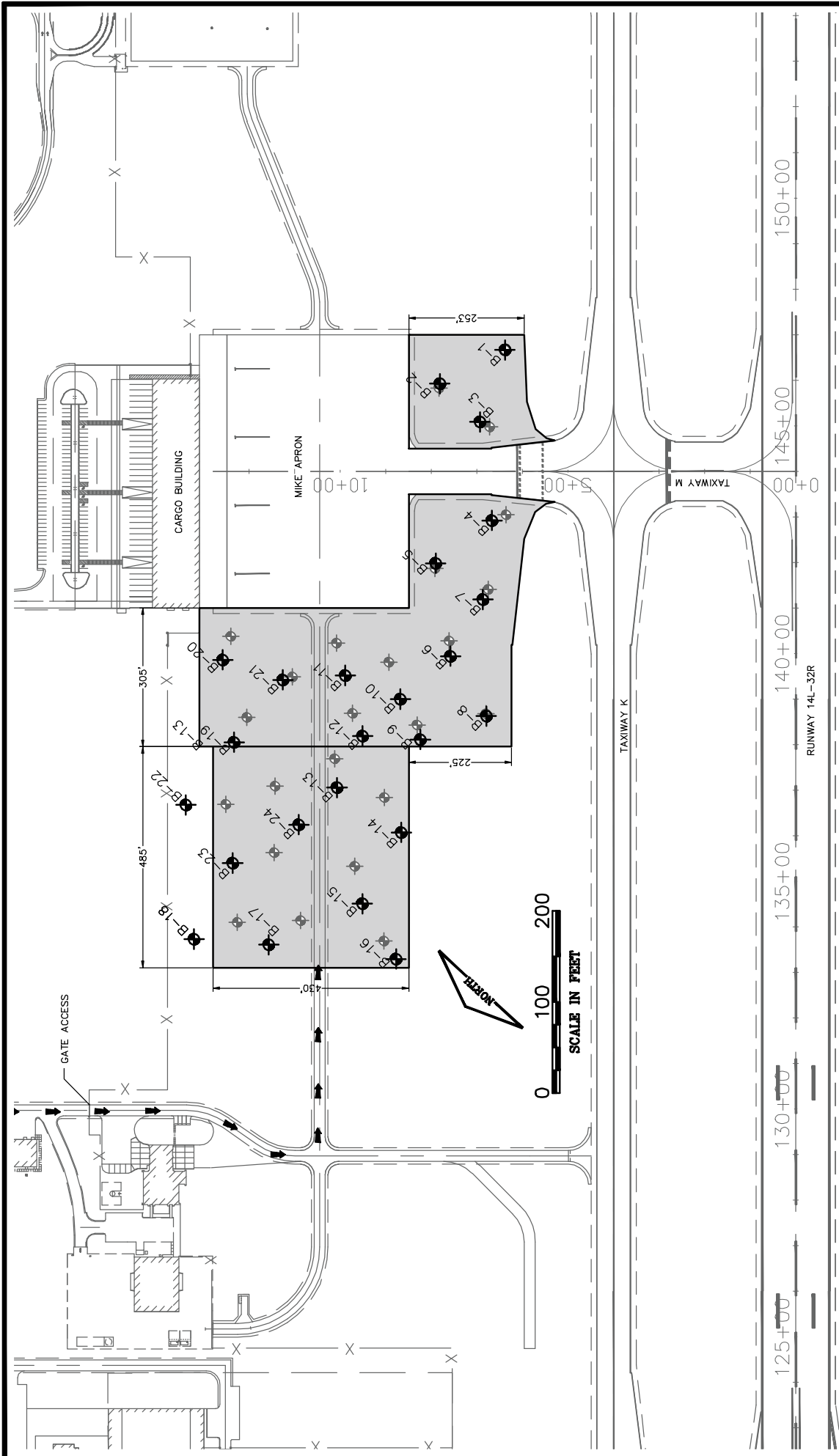
- Contractor
- Sub-Contractor

_____	_____
Print Name	Signature
_____	_____
Title	Date
_____	_____
Name of Firm	Telephone
_____	_____
Street Address	City/State/ZIP

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**BORING LOGS**

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<p><b>Kaskaskia</b> Engineering Group, LLC Professional Engineers Illinois Professional Design Firm Professional Engineering Group</p>	<p>22 Public Square, Suite 404 St. Louis, MO 63102 618.333.8777 Phone 618.333.8777 Fax www.kaskaskia.com</p>		<p>EXHIBIT</p>	
	<p><b>BORING LOCATION PLAN</b></p>		<p><b>MIDAMERICA ST. LOUIS AIRPORT</b> <b>MIKE APRON EXPANSION</b> <b>ST. CLAIR COUNTY, ILLINOIS</b></p>	
<p>PROFESSIONAL NO. 184.000773 LICENSE NO. 20-5090556</p>		<p>2</p>	<p>2</p>	<p>10-1020</p>



# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-1  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** N/A **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS					DEPTH (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	
3	1	SS		3	FILL: Brown, fat clay, with sand		1	10	9.0	50	31	3	
				7									5
6	2	SS		2	FILL: Brown, sandy lean clay			16	9.0			6	
				3									4
9	3	SS		6	FILL: Brown, sandy lean clay			12	9.0			9	
				15									14
12	4	SS		5	FAT CLAY (CH): Brown, with, sand			11	8.5			12	
				20									31
15	5	SS		5	FAT CLAY (CH): Brown, with, sand			15	9.0			15	
				3									11
18	6	SS		5	Boring terminated at 15.0 feet.			17	9.0			18	
				7									9

<b>WATER LEVEL:</b> _____ X _____ NONE OBSERVED WHILE DRILLING _____ ft WHILE DRILLING _____ ft _____ HRS AFTER DRILLING _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Sample and samples below are difficult to assess if fill or natural soils.
---	--



# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-2  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.6 **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
3	1	SS		3	FILL: Brown, fat clay, with sand		1							441
				3			2							
6	2	ST	18/24	4	FAT CLAY (CH): Brown, with sand		21	103	7.0					438
9	3	SS		1	FAT CLAY (CH): Brown, with sand		18		7.0					435
				2										
12	4	SS		4	SAND (SP-SC): Brown, fine, some clay		17		9.0					432
				8										
15	5	SS		13	FAT CLAY (CH): Brown, with sand		20							429
				13										
18	6	SS		10	With gravel		16		8.0					426
				12										
18				15	Boring terminated at 15.0 feet.									423

<b>WATER LEVEL:</b> _____ NONE OBSERVED WHILE DRILLING _____ 11.0 ft WHILE DRILLING _____ ft _____ HRS AFTER DRILLING _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Bulk sample obtained from auger cuttings from approximately 1 to 5 feet. Liquid limit and plasticity index are for the bulk sample. 2) Sample and sample below are difficult to assess if fill or natural soils.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-3  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 441.3 **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS					ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	
3	1	SS		3	FILL: Brown, lean clay			15	9.0				441
				4	FILL: Brown, fat clay								
6	2	SS		1	FAT CLAY (CH): Brown, with sand			23	2.5				438
				2									
9	3	SS		6	SANDY LEAN CLAY (CL): Brown			12	9.0				435
				9									
12	4	SS		6	FAT CLAY (CH): Brown, with sand			13	9.0				432
				12									
15	5	SS		6				16	7.5				429
				8									
18	6	SS		9				16	9.0				426
				14									
					Boring terminated at 15.0 feet.								426
													423

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-4  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 440.9 **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1	1	SS		1	SILTY CLAY (CL-ML): Brown			21	5.0				438	
				4										
3	2	SS		2	LEAN CLAY (CL): Brown			24	3.5				435	
				4										
6	3	SS		2	FAT CLAY (CH): Brown			21	5.5				432	
				4										
9	4	SS		2	With sand			22	4.5				429	
				4										
12	5	SS		4	Boring terminated at 15.0 feet.			21	7.0				426	
				5										
15	6	SS		2				19	2.0				423	
				3										
18														

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-5  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.9 **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
3	1	SS		3 3 4	FILL: Brown, lean clay			22		6.0				441
	2	SS		3 4 4	LEAN CLAY (CL): Brown			23		4.0				438
6	3	SS		2 2 5				21		4.5				435
	4	SS		2 4 4	FAT CLAY (CH): Brown, with sand			20		4.0				432
12	5	SS		3 3 4				19		4.0				429
	6	SS		2 3 5				21		9.0				426
15					Boring terminated at 15.0 feet.									
18														

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-6  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.6 **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX		
1	1	SS		3 6 7	SILT (ML): Gray			15		9.0					441
3	2	SS		3 4 6	SILTY CLAY (CL-ML): Brown			17		9.0					438
6	3	ST	19/24		LEAN CLAY (CL): Brown			21	106	6.5					435
9	4	SS		3 4 3				20		6.5					432
12	5	SS		2 2 4	FAT CLAY (CH): Brown, with sand			28		5.0					429
15	6	SS		1 2 2				23		1.5					426
18					Boring terminated at 15.0 feet.										423

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-7  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 441.8 **DATE DRILLED** 08/23/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS					ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	
3	1	SS		2	SILTY CLAY (CL-ML): Brown			23	3.5				441
				2									
6	2	SS		2	LEAN CLAY (CL): Brown			22	4.5				438
				3									
9	3	SS		3				22	5.5				435
				3									
12	4	SS		2	FAT CLAY (CH): Brown, with sand		1	22	2.5				432
				3									
15	5	SS		2				21	3.0				429
				-									
18	6	ST	19/24		SANDY LEAN CLAY (CL): Brown			18	111	4.5			426
					Boring terminated at 15.0 feet.								423

<b>WATER LEVEL:</b> <input type="checkbox"/> X NONE OBSERVED WHILE DRILLING <input type="checkbox"/> _____ ft WHILE DRILLING <input type="checkbox"/> _____ ft _____ HRS AFTER DRILLING <input type="checkbox"/> _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Automatic hammer malfunctioning during SPT.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-8  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.3 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX		
1	1	SS		3	SILT (ML): Gray			20		6.5					441
3				2											
				3											
3					LEAN CLAY (CL): Brown		1								
2	2	SS		2				23		3.0		38	18		438
				2											
				4											
6				1											
				2											
				3											
3	3	SS		1				22		3.5					435
				2											
				3											
9				2											
				2											
				4											
4	4	SS		2				21		5.5					432
				2											
				4											
12				2	FAT CLAY (CH): Brown, with sand										
				3											
				4											
5	5	SS		2				23		6.5					429
				3											
				4											
12				3											
				4											
6	6	SS		4	Becomes brown and gray			25		5.0					423
				3											
				4											
15					Boring terminated at 15.0 feet.										426
18															423

<b>WATER LEVEL:</b> _____ X _____ NONE OBSERVED WHILE DRILLING _____ ft _____ WHILE DRILLING _____ ft _____ HRS AFTER DRILLING _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Bulk sample obtained from auger cuttings from approximately 3.5 to 7.5 feet. Liquid limit and plasticity index are for the bulk sample.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-9  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.6 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX		
1	1	SS		1 3	FILL: Brown, lean clay			25		5.0					441
3				3											
3					SILTY CLAY (CL-ML): Gray										
6	2	SS		1 2 4				24		6.0					438
6					LEAN CLAY (CL): Brown										
9	3	SS		1 3 3				24		3.5					435
9															
9	4	SS		1 1 3				24		3.5					432
12					FAT CLAY (CH): Brown and gray, with sand										
12	5	SS		2 4 5				20		8.5					429
15															
15	6	SS		2 3 5				24		6.0					426
15					Boring terminated at 15.0 feet.										423
18															

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>   
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-10  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.9 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS					ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT		PLASTICITY INDEX
1	1	SS		2 4 5	LEAN CLAY (CL): Gray and brown, (medium plastic)			24		6.0				441
3	2	SS		2 3 4	Becomes low plastic		22		8.0				438	
6	3	SS		3 3 5	Becomes brown		21		3.0				435	
9	4	SS		2 3 4			22		4.0				432	
12	5	SS		1 2 3	FAT CLAY (CH): Brown, with sand		21		4.5				429	
15	6	SS		1 3 4	Becomes brown and gray		25		4.0				426	
18					Boring terminated at 15.0 feet.									

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-11  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 441.9 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
3	1	SS		1	LEAN CLAY (CL): Gray, (medium plastic)			23	4.0				441	
				3										
6	2	SS		1	Becomes low plastic			23	9.0				438	
				2										
9	3	SS		2	Becomes brown			24	3.5				435	
				1										
12	4	SS		2	Becomes brown and gray			23	4.0				432	
				2										
15	5	SS		2	Becomes brown, with sand (medium plastic)			21	6.5				429	
				3										
18	6	SS		4	FAT CLAY (CH): Gray, with sand			21	4.0				426	
				2										
					Boring terminated at 15.0 feet.								423	

<b>WATER LEVEL:</b> <input checked="" type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-12  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.4 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1	1	SS		3	FILL: Brown and gray, fat clay			18	9.0				441	
				5										6
3	2	SS		3	SILTY CLAY (CL-ML): Gray			21	5.5				438	
				3										3
6	3	SS		1	LEAN CLAY (CL): Brown			23	3.0				435	
				2										3
9	4	SS		1	Becomes medium plastic			26	2.5				432	
				2										3
12	5	SS		1	FAT CLAY (CH): Brown and gray, with sand			27	1.0				429	
				1										2
15	6	SS		2	Boring terminated at 15.0 feet.			27	2.5				426	
				2										4
18														423

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-13  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.5 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS					ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	
1	1	SS		2	FILL: Gray and brown, fat clay		1						441
				2									
3				2	LEAN CLAY (CL): Gray and brown								438
				2									
6	2	SS		1	Becomes brown								435
				1									
9	3	SS		1	Becomes medium plastic								432
				1									
12	4	SS		2	FAT CLAY (CH): Brown, with sand								429
				2									
15	5	SS		3	Becomes brown and gray								426
				3									
18	6	SS		1	Boring terminated at 15.0 feet.								423
				2									

<b>WATER LEVEL:</b> <input checked="" type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Sample is difficult to assess if fill or natural soils.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-14  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.7 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1-3	1	SS		2	LEAN CLAY (CL): Gray and brown, (medium plastic)			22	7.0				441	
				3										
3-6	2	SS		3	Becomes brown and low plastic			19	8.0				438	
				6										
6-9	3	SS		2				22	5.0				435	
				3										
9-12	4	SS		2				20	5.5				432	
				3										
12-15	5	SS		2	FAT CLAY (CH): Brown, with sand			22	3.0				429	
				4										
15-18	6	SS		2	Boring terminated at 15.0 feet.			23	1.5				426	
				2										
18														423

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-15  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 443.3 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS					ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT		PLASTICITY INDEX
1	1	SS		3 4 5	FILL: Brown, silty clay		1	19		9.0				441
3					LEAN CLAY (CL): Brown									
2	2	SS		2 3 4				18		8.5				438
6														
3	3	SS		2 3 5				22		4.0				435
9														
4	4	SS		2 2 4				22		3.5				432
12					FAT CLAY (CH): Brown, with sand									432
5	5	ST	18/24					22	105	2.5				429
15					Becomes brown and gray									429
6	6	SS		2 3 5				23		5.5				426
15					Boring terminated at 15.0 feet.									426
18														426

<b>WATER LEVEL:</b> <input checked="" type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Sample is difficult to assess if fill or natural soils.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-16  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 443.4 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1	1	SS		3	FILL: Brown, silty clay		1	14	9.0				441	
				5										
3	2	SS		4	FILL: Brown, lean clay, with sand		17	8.0				438		
				6										
6	3	SS		2	LEAN CLAY (CL): Brown, with sand		19	7.0				435		
				5										
9	4	SS		2			18	5.0				432		
				3										
12	5	SS		1			19	2.5				429		
				3										
15	6	SS		2	FAT CLAY (CH): Brown and gray, with sand		24	4.0				426		
				3										
18				4	Boring terminated at 15.0 feet.							426		

<b>WATER LEVEL:</b> <input checked="" type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Sample and sample below are difficult to assess if fill or natural soils.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-17  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 443.2 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX		
1 - 3	1	SS		2 4 5	FILL: Gray, lean clay		1	22		9.0					441
	2	SS		1 4 5	FILL: Brown, silty clay		2	19		8.0		38	16		438
3 - 6	3	SS		2 3 5	LEAN CLAY (CL): Brown			25		4.5					435
	4	SS		3 3 4				21		5.5					432
6 - 12	5	SS		2 4 5	FAT CLAY (CH): Reddish brown and gray, with sand			21		8.0					429
	6	SS		1 3 3	Becomes gray and brown			23		4.5					426
15 - 18					Boring terminated at 15.0 feet.										

<b>WATER LEVEL:</b> _____ X _____ NONE OBSERVED WHILE DRILLING _____ ft WHILE DRILLING _____ ft _____ HRS AFTER DRILLING _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Sample and sample below are difficult to assess if fill or natural soils. 2) Bulk sample obtained from auger cuttings from approximately 3.5 to 7.5 feet. Liquid limit and plasticity index are for the bulk sample.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-18  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.2 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX		
3	1	ST	13/24		FILL: Gray and brown, lean clay		1	20	107	9.0					441
6	2	SS		2 3 4	Becomes brown			24		5.5					438
6	LEAN CLAY (CL): Brown														
9	3	SS		2 3 5				23		3.0					435
9	4	SS		2 4 5				21		5.5					432
12	FAT CLAY (CH): Brown														
12	5	SS		2 2 4				22		3.0					429
15	6	SS		1 2 3	Becomes brown and gray, with sand			27		4.0					429
15	Boring terminated at 15.0 feet.														426
18															423

<b>WATER LEVEL:</b> <input checked="" type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Sample and sample below are difficult to assess if fill or natural soils.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-19  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.4 **DATE DRILLED** 08/24/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1	1	SS		2	FAT CLAY (CH): Gray and brown		1						441	
				3										22
3	2	SS		1	LEAN CLAY (CL): Gray								438	
				2										26
6	3	ST	17/24		Becomes brown								435	
				2										23
9	4	SS		1									432	
				2										24
12	5	SS		1	Becomes medium plastic								429	
				2										25
15	6	SS		2	FAT CLAY (CH): Reddish brown and gray								426	
				3										25
18					Boring terminated at 15.0 feet.								423	

<b>WATER LEVEL:</b> _____ X NONE OBSERVED WHILE DRILLING _____ ft WHILE DRILLING _____ ft _____ HRS AFTER DRILLING _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b> 1) Bulk sample obtained from auger cuttings from approximately 1 to 5 feet. Liquid limit and plasticity index are for the bulk sample.
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-20  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.1 **DATE DRILLED** 08/25/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
3	1	SS		3	LEAN CLAY (CH): Gray and brown (medium plastic)			24	6.5		47	26	441	
				2										
				3										
6	2	SS		3	LEAN CLAY (CL): Gray			26	1.5				438	
				2										
				3										
9	3	SS		2	Becomes brown			24	5.0				435	
				2										
				2										
12	4	SS		1	FAT CLAY (CH): Gray and brown, with sand			24	5.0				432	
				2										
				2										
15	5	SS		1	Becomes gray			23	3.5				429	
				2										
				2										
18	6	SS		1	Boring terminated at 15.0 feet.			26	1.5				426	
				2										
				2										

<b>WATER LEVEL:</b> <input type="checkbox"/> X NONE OBSERVED WHILE DRILLING <input type="checkbox"/> _____ ft WHILE DRILLING <input type="checkbox"/> _____ ft _____ HRS AFTER DRILLING <input type="checkbox"/> _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>   
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-21  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 441.9 **DATE DRILLED** 08/25/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
3	1	SS		1	FAT CLAY (CH): Gray and brown			26	4.0				441	
				2										
				3										
6	2	SS		1	LEAN CLAY (CL): Gray			26	3.0			438		
				1										
				3										
9	3	SS		1	Becomes brown			24	3.0			435		
				3										
				3										
12	4	SS		1	FAT CLAY (CH): Gray and brown			24	3.0			432		
				2										
				2										
15	5	SS		2	Becomes gray, with sand			22	4.0			429		
				3										
				4										
18	6	SS		2	Boring terminated at 15.0 feet.			22	3.0			426		
				3										
				4										

<b>WATER LEVEL:</b> <input type="checkbox"/> X NONE OBSERVED WHILE DRILLING <input type="checkbox"/> _____ ft WHILE DRILLING <input type="checkbox"/> _____ ft _____ HRS AFTER DRILLING <input type="checkbox"/> _____ ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>   
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-22  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.7 **DATE DRILLED** 08/25/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1	1	SS		3	FAT CLAY (CH): Gray and brown			21	9.0				441	
				6										7
3	2	SS		3	LEAN CLAY (CL): Gray			15	9.0				438	
				5										4
6	3	SS		4	Becomes brown, with sand			22	6.5				435	
				5										6
9	4	SS		3				23	4.5				432	
				3										
12	5	SS		2				22	3.0				429	
				2										4
15	6	SS		2	FAT CLAY (CH): Brown, with sand			20	3.5				426	
				2										4
18					Boring terminated at 15.0 feet.								423	

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-23  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 443.3 **DATE DRILLED** 08/25/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)	
	NUMBER	TYPE	RECOVERY (in/in)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX		
3	1	SS		3 4 5	LEAN CLAY (CL): Gray, (medium plastic)			21		9.0					441
6	2	SS		2 4 6	Becomes brown and low plastic			23		6.5					438
9	3	SS		2 2 3				25		4.5					435
12	4	SS		2 3 3				24		2.5					432
15	5	SS		2 2 4	With sand and becomes medium plastic			20		4.0					432
15	6	SS		2 3 5	FAT CLAY (CH): Brown, with sand			25		5.5					429
18					Boring terminated at 15.0 feet.										426

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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# BORING LOG

**PROJECT** MidAmerica Airport Mike Apron Expansion **BORING NUMBER** B-24  
**LOCATION** St. Clair County, Illinois **SHEET** 1 **of** 1  
**DRILLER** Terra Drill, Inc. **HAMMER** Automatic **PROJECT NO.** 10-1020  
**EQUIPMENT** CME 550 w/HSA **ELEVATION** 442.9 **DATE DRILLED** 08/25/10

DEPTH (ft)	SAMPLE				DESCRIPTION (UNIFIED SOIL CLASSIFICATION)	GRAPHIC	SEE REMARK NO.	LABORATORY TEST RESULTS						ELEVATION (ft)
	NUMBER	TYPE	RECOVERY (in/ft)	BLOWS (per 6 in)				MOISTURE CONTENT (%)	DRY DENSITY (pcf)	HAND PENETROMETER (ksf)	UNCONFINED COMPRESSIVE STRENGTH (ksf)	LIQUID LIMIT	PLASTICITY INDEX	
1	1	SS		3	LEAN CLAY (CL): Gray and brown			23	9.0				441	
3				3										
6	2	SS		3	Becomes brown			23	3.5				438	
				2										
9	3	SS		1				25	3.0				435	
				2										
12	4	SS		2	Becomes medium plastic			23	3.5				432	
				3										
15	5	SS		2	FAT CLAY (CH): Brown, with sand			22	4.0				429	
				2										
18	6	SS		4	Boring terminated at 15.0 feet.			25	3.0				426	
				4										

<b>WATER LEVEL:</b> <input type="checkbox"/> NONE OBSERVED WHILE DRILLING <input type="checkbox"/> ft WHILE DRILLING <input type="checkbox"/> ft _____ HRS AFTER DRILLING <input type="checkbox"/> ft _____ DAYS AFTER DRILLING	<b>REMARKS:</b>  
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