

RETURN WITH BIDLETTING DATE April 29, 2005ITEM NUMBER 6A

Proposal Submitted By

Name _____

Address _____

City/State _____

Zip Code _____ Telephone Number _____

FEIN Number _____ FAX Number _____

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 Chicago-RomeovilleMUNICIPAL DESIGNATION RomeovilleCOUNTY DESIGNATION WillILLINOIS PROJECT NO. LOT-3441FEDERAL PROJECT NO. 3-17-0140-B38

PLEASE MARK THE APPROPRIATE BOX BELOW:

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

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.

HOW MANY PROPOSALS SHOULD PROSPECTIVE BIDDERS REQUEST?: Prospective bidders should, prior to submitting their initial request for plans and proposals, determine their needs and request the total number of plans and proposals needed for each item requested. There will be a nonrefundable charge of \$15 for each set of plans and specifications issued.

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.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a “Request for Proposal Forms and Plans” 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 **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial. If a contractor has requested to bid but has not received a **Proposal Denial and/or Authorization Form**, 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
Mailing of plans and proposals	217/782-7806



1. Proposal of _____

for the improvement officially known as:

- (a) Chicago-Romeoville 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:

Extend Taxiway E; Construct GA Apron, AVGAS Fueling Apron and Auto Parking 100.

TO THE DEPARTMENT OF TRANSPORTATION

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," adopted January, 1985, the "Supplemental Specifications and Recurring Special Provisions," adopted July 1, 2004 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 140 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

<u>Original Contract Amount</u>		<u>Daily Charge</u>
<u>From More Than</u>	<u>To and Including</u>	<u>Calendar Day</u>
\$ 0	\$ 25,000	\$ 300
25,000	100,000	375
100,000	500,000	550
500,000	1,000,000	725
1,000,000	2,000,000	900
2,000,000	3,000,000	1,100
3,000,000	5,000,000	1,300
5,000,000	7,500,000	1,450
7,500,000	10,000,000	1,650

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, 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 bonds 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 and guaranteeing payment in full all bills and accounts for materials and labor used in the construction of the work.

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	to \$5,000\$150	\$2,000,000	to \$3,000,000 \$100,000
\$5,000	to \$10,000\$300	\$3,000,000	to \$5,000,000 \$150,000
\$10,000	to \$50,000\$1,000	\$5,000,000	to \$7,500,000 \$250,000
\$50,000	to \$100,000\$3,000	\$7,500,000	to \$10,000,000 \$400,000
\$100,000	to \$150,000\$5,000	\$10,000,000	to \$15,000,000 \$500,000
\$150,000	to \$250,000\$7,500	\$15,000,000	to \$20,000,000 \$600,000
\$250,000	to \$500,000\$12,500	\$20,000,000	to \$25,000,000\$700,000
\$500,000	to \$1,000,000\$25,000	\$25,000,000	to \$30,000,000 \$800,000
\$1,000,000	to \$1,500,000\$50,000	\$30,000,000	to \$35,000,000 \$900,000
\$1,500,000	to \$2,000,000\$75,000	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.

RETURN WITH BID

(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.

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 his/her schedule of prices covering the work to be performed under this contract; he/she understands that he/she must show in the schedule the unit prices (with no more than two decimal places, i.e. \$25.35, not \$25.348) for which he/she proposes to perform each item of work, that the extensions must be made by him/her, and that if not so done his/her proposal may be rejected as irregular.

The undersigned further agrees that the unit prices submitted herewith are for the purpose of obtaining a gross sum, and for use in computing the value of additions and deductions; that if there is a discrepancy between the gross sum bid and that resulting from the summation of the quantities multiplied by their respective unit prices, the latter shall govern.

STATE JOB #- - - -

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - LE035

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COUNTY NAME	CODE	DIST	AIRPORT NAME	FED PROJECT	ILL PROJECT
WILL	197	01	LEWIS UNIVERSITY	3-17-0140-B38	LO-T -3441

***** BASE *****

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR106512	TYPE A AREA LGT POLE W/2 FIXTURES	EACH	1.000 X		=		
AR108608	3/C #8 600 V UG CABLE	L.F.	95.000 X		=		
AR109400	POWER DISTRIBUTION SYSTEM	L.S.	1.000 X		=		
AR110212	2" STEEL DUCT, DIRECT BURY	L.F.	95.000 X		=		
AR110502	2-WAY CONCRETE ENCASED DUCT	L.F.	111.000 X		=		
AR110504	4-WAY CONCRETE ENCASED DUCT	L.F.	82.000 X		=		
AR110506	6-WAY CONCRETE ENCASED DUCT	L.F.	56.000 X		=		
AR110610	ELECTRICAL HANDHOLE	EACH	1.000 X		=		
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1.000 X		=		
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	25,580.000 X		=		
AR152442	OFFSITE BORROW EXCAVATION	C.Y.	15,390.000 X		=		
AR152540	SOIL STABILIZATION FABRIC	S.Y.	2,370.000 X		=		
AR156510	SILT FENCE	L.F.	858.000 X		=		
AR156513	SEPARATION FABRIC	S.Y.	2,370.000 X		=		
AR162900	REMOVE CLASS E FENCE	L.F.	62.000 X		=		

LEWIS UNIVERSITY
WILL

ILLINOIS DEPARTMENT OF TRANSPORTATION
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR201610	BITUMINOUS BASE COURSE	TON	3,660.000 X		=		
AR201630	BITUMINOUS BASE TEST SECTION	EACH	1.000 X		=		
AR209606	CRUSHED AGG. BASE COURSE - 6"	S.Y.	1,238.000 X		=		
AR209610	CRUSHED AGG. BASE COURSE - 10"	S.Y.	2,547.000 X		=		
AR209612	CRUSHED AGG. BASE COURSE - 12"	S.Y.	27,961.000 X		=		
AR401610	BITUMINOUS SURFACE COURSE	TON	3,535.000 X		=		
AR401630	BITUMINOUS SURFACE TEST SECTION	EACH	1.000 X		=		
AR401650	BITUMINOUS PAVEMENT MILLING	S.Y.	427.000 X		=		
AR401665	BITUMINOUS PAVEMENT SAWING	L.F.	957.000 X		=		
AR401900	REMOVE BITUMINOUS PAVEMENT	S.Y.	2,973.000 X		=		
AR401910	REMOVE & REPLACE BIT. PAVEMENT	S.Y.	134.000 X		=		
AR501506	6" PCC PAVEMENT	S.Y.	1,211.000 X		=		
AR501530	PCC TEST BATCH	EACH	1.000 X		=		
AR510510	TIE DOWN	EACH	33.000 X		=		
AR510515	GROUND ROD	EACH	10.000 X		=		

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ILLINOIS DEPARTMENT OF TRANSPORTATION
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR602510	BITUMINOUS PRIME COAT	GAL.	12,203.000 X		=		
AR603510	BITUMINOUS TACK COAT	GAL.	4,986.000 X		=		
AR620530	PAVEMENT MARKING-EPOXY	S.F.	7,292.000 X		=		
AR620900	PAVEMENT MARKING REMOVAL	S.F.	524.000 X		=		
AR701430	30" RCP, CLASS III	L.F.	278.000 X		=		
AR701512	12" RCP, CLASS IV	L.F.	646.500 X		=		
AR701515	15" RCP, CLASS IV	L.F.	417.000 X		=		
AR701518	18" RCP, CLASS IV	L.F.	225.000 X		=		
AR701521	21" RCP, CLASS IV	L.F.	454.000 X		=		
AR701524	24" RCP, CLASS IV	L.F.	343.500 X		=		
AR701719	RCEP SPAN 38 RISE 24	L.F.	54.000 X		=		
AR701900	REMOVE PIPE	L.F.	122.500 X		=		
AR705412	POROUS BACKFILL NO. 2	C.Y.	529.000 X		=		
AR705506	6" PERFORATED UNDERDRAIN	L.F.	6,381.000 X		=		
AR705630	UNDERDRAIN INSPECTION HOLE	EACH	3.000 X		=		

LEWIS UNIVERSITY
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ILLINOIS DEPARTMENT OF TRANSPORTATION
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR705640	UNDERDRAIN CLEANOUT	EACH	16.000 X		=		
AR705904	REMOVE UNDERDRAIN CLEANOUT	EACH	1.000 X		=		
AR751411	INLET-TYPE A	EACH	5.000 X		=		
AR751540	MANHOLE 4'	EACH	5.000 X		=		
AR751550	MANHOLE 5'	EACH	2.000 X		=		
AR751560	MANHOLE 6'	EACH	4.000 X		=		
AR751567	MANHOLE 7'	EACH	2.000 X		=		
AR751903	REMOVE MANHOLE	EACH	1.000 X		=		
AR751943	ADJUST MANHOLE	EACH	2.000 X		=		
AR752412	PRECAST REINFORCED CONC. FES 12"	EACH	4.000 X		=		
AR752421	PRECAST REINFORCED CONC. FES 21"	EACH	1.000 X		=		
AR752430	PRECAST REINFORCED CONC. FES 30"	EACH	1.000 X		=		
AR752512	GRATING FOR CONC. FES 12"	EACH	4.000 X		=		
AR752521	GRATING FOR CONC. FES 21"	EACH	1.000 X		=		
AR752530	GRATING FOR CONC. FES 30"	EACH	1.000 X		=		

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ILLINOIS DEPARTMENT OF TRANSPORTATION
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR752730	P R CONC. FES EQ. ROUND SIZE 30"	EACH	2.000 X		=		
AR752900	REMOVE END SECTION	EACH	5.000 X		=		
AR754410	COMB CONCRETE CURB & GUTTER	L.F.	188.000 X		=		
AR800914	90-FOOT HIGH MAST SYSTEM W/3 FIXT	EACH	2.000 X		=		
AR800916	POLE NO. 1 CABLES IN UNIT DUCT	L.F.	205.000 X		=		
AR800917	POLE NO. 2 CABLES IN UNIT DUCT	L.F.	670.000 X		=		
AR800918	POLE NO. 3 CABLES IN UNIT DUCT	L.F.	370.000 X		=		
AR800925	CA-3 AGGREGATE BACKFILL	C.Y.	263.000 X		=		
AR800926	CA-6 AGGREGATE BACKFILL	C.Y.	1,530.000 X		=		
AR800928	OIL/WATER SEPERATOR MANHOLE	EACH	1.000 X		=		
AR800937	CONSERVATION COVER	ACRE	1.400 X		=		
AR800990	POWER CABLES IN DUCT	L.F.	168.000 X		=		
AR800991	PCC UTILITY TRENCH	L.F.	105.900 X		=		
AR800992	GRATING FOR CONC. FES EQ. RD. SIZ	EACH	2.000 X		=		
AR800993	BOLLARD	EACH	2.000 X		=		

LEWIS UNIVERSITY
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AR800994	UNCLASSIFIED DISPOSAL HAUL ON-SIT	C.Y.	10,770.000				
AR901510	SEEDING	ACRE	6.600				
AR905510	TOPSOILING (FROM ON SITE)	C.Y.	3,360.000				
AR908510	MULCHING	ACRE	6.600				
SUBTOTAL BASE						\$	

***THE DEPARTMENT RESERVES THE RIGHT TO AWARD THIS CONTRACT ON THE
***BASIS OF ANY OF THE ALTERNATES OR COMBINATION THEREOF.

LEWIS UNIVERSITY
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ILLINOIS DEPARTMENT OF TRANSPORTATION
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***** ALT 1 *****

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
AS162320	CLASS E GATE 20' VINYL	EACH	2.000 X		=		
AS162406	CLASS E FENCE, VINYL 6'	L.F.	3,816.000 X		=		
AS162720	ELECTRIC GATE 20'	EACH	1.000 X		=		
AS162724	ELECTRIC GATE 24'	EACH	1.000 X		=		
AS800922	GATE CABLES IN UNIT DUCT	L.F.	697.000 X		=		
AS800993	BOLLARD	EACH	8.000 X		=		
AS800995	CLASS E GATE 5' VINYL	EACH	4.000 X		=		

SUBTOTAL ALT 1 \$
CONTRACT - LE035

SUMMARY OF TOTAL ALTERNATES		
	DOLLARS	CTS
TOTAL BASE \$		
TOTAL ALT 1 \$		

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

LEWIS UNIVERSITY
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ILLINOIS DEPARTMENT OF TRANSPORTATION
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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. 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 termination of the contract and the suspension or debarment of the bidder.

II. ASSURANCES

A. 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. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

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 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. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-10.

RETURN WITH BID

C. 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 \$145,877.00. Sixty percent of the salary is \$87,526.20.

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.

D. 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.

RETURN WITH BID

E. 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.

F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, associate procurement officers, State purchasing officers, 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.

G. 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.

H. 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.

RETURN WITH BID

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.

III. CERTIFICATIONS

A. 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. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

B. 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 shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

RETURN WITH BID

C. 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.

D. 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.

E. 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.

RETURN WITH BID

F. 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.

G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency 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 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 contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, 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

H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor 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 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

I. Section 42 of the Environmental Protection Act

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency 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 contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

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 Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, 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.

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. 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: For bidders that have previously submitted the information requested in Form A

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may sign the following certification statement indicating that the information previously submitted by the bidder is, as of the date of signature, current and accurate. The Certification must be signed and dated by a person who is authorized to execute contracts for the bidding company. Before signing this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder signs the Certification, the Bidder should proceed to Form B instructions.

CERTIFICATION STATEMENT

I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.

(Bidding Company)

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

Form A: For bidders who have NOT previously submitted the information requested in Form A

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 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 the second page of 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 \$87,526.20? YES _____ NO _____
3. Does anyone in your organization receive more than \$87,526.20 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 \$87,526.20? 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 on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

Form B: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the bidding entity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. *Note: Signing the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed 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 signature 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.

D. Bidders Submitting More Than One Bid

Bidders submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

- The bid submitted for letting item _____ contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number		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 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 \$87,526.20 (60% of the Governor’s salary as of 10/1/2000). **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)	
NAME:	_____
ADDRESS	_____
Type of ownership/distributable income share:	
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 _____

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.
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 _____

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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 _____

(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 _____

(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.

Completed by:

Name of Authorized Representative (type or print)

Completed by:

Title of Authorized Representative (type or print)

Completed by:

_____ Date
Signature of Individual or Authorized Representative

NOT APPLICABLE STATEMENT

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.

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

_____ Date
Signature of Authorized Representative

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number		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 SIGNED

Name of Authorized Representative (type or print)	

Title of Authorized Representative (type or print)	
_____	_____
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 _____

NOTICE REGARDING SIGNATURE

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

Signature: _____ Title: _____ Date: _____

- 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

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 five 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., April 29, 2005. 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:

Extend Taxiway E; Construct GA Apron, AVGAS Fueling Apron and Auto Parking 100.
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 pre-bid conference held at N/A at the Chicago-Romeoville Airport administration building. For engineering information, contact Ron Hudson of Hanson Professional Services, Inc. at (630) 990-3800.
6. **DISADVANTAGED BUSINESS POLICY.** The DBE goal for this contract is 22.0%.
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 March 25, 2005 and the Construction Plans dated March 25, 2005 as approved by the Department of Transportation, Division of Aeronautics.

RETURN WITH BID

- 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.
- 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.

RETURN WITH BID

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 140 calendar days and is based on anticipated notice-to-proceed date of June 10, 2005.

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

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

Item No. 6A
Letting Date: April 29, 2005

Airport: Chicago-Romeoville Airport
Ill. Proj. No. LOT-3441
Fed. Proj. No. 3-17-0140-B38

KNOW ALL MEN BY THESE PRESENTS. that we, _____, as PRINCIPAL, and _____, as SURETY are held and firmly bound unto the, hereinafter called the SPONSOR, in the penal sum of 5 percent of the total bid price or of the amount specified in Section 6, PROPOSAL GUARANTEE of the Proposal Document, whichever is the lesser sum, well and truly to be paid unto the said SPONSOR, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns.

THE CONDITION OF THIS 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 PRINCIPAL shall within the time and as specified in the Bidding and Contract Documents, submit the DBE Utilization Plan that is acceptable and approved by the AGENT, and if after the award, the PRINCIPAL shall enter into a contract in accordance with the terms of the Bidding and Contract Documents including evidence of insurance coverage's and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for 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 in the Bid Proposal and such larger amount for which the SPONSOR may contract with another party to perform the work covered by said Proposal Document, then, this obligation to be void; otherwise to 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 the SURETY shall pay the penal sum to the SPONSOR within fifteen (15) days of written demand therefor. If the SURETY does not make full payment within such period of time, the AGENT may bring an action to collect the amount owed. The 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 WITNESS WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by

their respective officers this _____ day of _____ A.D., 20 ____.

PRINCIPAL

SURETY

(Company Name)

(Company Name)

By: _____
(Signature & Title)

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

Notary Certification for Principal and Surety

State of Illinois)
) ss:
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 uses and purposes therein set forth.

Given under my hand and notary seal this _____ day of _____ A.D., 20 ____

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 below, the PRINCIPAL is ensuring the identified electronic bid bond has been executed and the PRINCIPAL and SURETY are firmly bound to 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 _____
Form D.E. (Rev. 12-2001)



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 323
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, Illinois 62764

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

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

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). 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.

- (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. 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. 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. 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. 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. The bidder shall submit his proposal on the form furnished by the Department. The proposal shall be executed property, 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. 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. 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. 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. 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. 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. 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. 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. 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. 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 FAA 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. 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. 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. 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. 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 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. 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. 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	

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<u>Economic Area</u>	<u>Goal (percent)</u>
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	
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	

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APPENDIX B (CONTINUED)

<u>Economic Area</u>	<u>Goal (percent)</u>
6120 Peoria, IL - IL - Peoria, Tazewell, Woodford	4.4
Non-SMSA Counties - IL - Fulton, Knox, McDonough, Marshall, Mason, Schuyler, Stark, Warren	3.3
088 Rockford, IL: SMSA Counties: 6880 Rockford, IL - IL - Boone, Winnebago	6.3
Non-SMSA Counties - IL - Lee, Ogle, Stephenson	4.6
098 Dubuque, IA: Non-SMSA Counties - IL - JoDaviess IA - Atlamakee, Clayton, Delaware, Jackson, Winnesheik WI - Crawford, Grant, Lafayette	0.5
099 Davenport, Rock Island, Moline, IA - IL: SMSA Counties: 1960 Davenport, Rock Island, Moline, IA - IL - IL - Henry, Rock Island IA - Scott	4.6
Non-SMSA Counties - IL - Carroll, Hancock, Henderson, Mercer, Whiteside IA - Clinton, DesMoines, Henry, Lee, Louisa, Muscatine MO - Clark	3.4
107 St. Louis, MO: SMSA Counties: 7040 St. Louis, MO - IL - IL - Clinton, Madison, Monroe, St. Clair MO - Franklin, Jefferson, St. Charles, St. Louis, St. Louis City	14.7
Non-SMSA Counties - IL - Alexander, Bond, Calhoun, Clay, Effingham, Fayette, Franklin, Greene, Jackson, Jasper, Jefferson, Jersey, Johnson, Macoupin, Marion, Montgomery, Perry, Pulaski, Randolph, Richland, Union, Washington, Wayne, Williamson MO - Bollinger, Butler, Cape Girardeau, Carter, Crawford, Dent, Gasconade, Iron, Lincoln, Madison, Maries, Mississippi, Montgomery, Perry, Phelps, Reynolds, Ripley, St. Francois, St. Genevieve, Scott, Stoddard, Warren, Washington, Wayne	11.4

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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.

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.

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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.
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.

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- 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.
- 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.

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- 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.
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

- I. **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. 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. 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 DBE Directory or most recent addendum.
- II. **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 federally-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.
- III. **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 is 22.77% of 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 this goal. The dollar amount paid to all approved DBE firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.
- IV. **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 **22.0%** 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 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 firmly committed 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.

- V. DBE LOCATOR REFERENCES: Bidders may consult the DBE Directory as a reference source for DBE companies certified by the Department. 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.state.il.us.
- VI. BIDDING PROCEDURES: Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid nonresponsive.
- A. In order to assure the timely award of the contract, the as-read low bidder must submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven (7) working days after the date of letting. To meet the seven (7) day requirement, the bidder may send the Plan by certified mail or delivery service within the seven (7) working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the as-read low bidder to ensure that the postmark or receipt date is affixed within the seven (7) working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted 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). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven (7) day submittal requirement, and the bid will be declared nonresponsive. In the event the bid is declared nonresponsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.
- 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. The signatures on these forms must be original signatures. 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 each DBE to be used;
 2. A description, including pay item numbers, of the commercially useful work to be done by each DBE;
 3. The price to be paid to each DBE for the identified work specifically stating 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. A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
 5. If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).

D. The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five (5) working day period in order to cure the deficiency.

VII. 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% 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 firm does not count toward the DBE goals.

B. DBE as a joint venture Contractor: 100% 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% goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.

D. DBE as a trucker: 100% 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 full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.

E. DBE as a material supplier:

1. 60% goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
2. 100% goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
3. 100% credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

VIII. GOOD FAITH EFFORT PROCEDURES: If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt 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 could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those 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 prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors 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 contractor'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 contractor'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 Contractor 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 a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will

designate a five (5) working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.

- C. The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five (5) working days after the notification date of the determination by delivering the request to the Department of Transportation, Division of Aeronautics, 1 Langhorne Bond Drive, Capital Airport, Springfield, IL 62707-8415 (Telefax: 217-785-4533). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final 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. In addition, the request shall be considered a consent by the bidder to extend the time for award. 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 (10) 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 nonresponsive.

IX. 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 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 Division of Aeronautics. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Division of Aeronautics, 1 Langhorne Bond Drive, Capital Airport, Springfield, IL 62707-8415. Telephone number (217) 785-8514. Telefax number (217) 785-4533.
- B. 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. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated 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 DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Division of Aeronautics 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 Division and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Division 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.

- C. 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 therefor to the DBE by the Contractor, but not later than thirty (30) calendar days after payment has been made by the Department to the Contractor for such work or material without regard to any retainage withheld by the Department, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Division's Chief Engineer. If full and final payment has not been made to the DBE, the Report 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 Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.

- D. 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.

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.

SECTION III

SPECIAL PROVISIONS

**CHICAGO-ROMEovILLE AIRPORT (LOT)
ROMEovILLE, WILL COUNTY, ILLINOIS**

EXTEND TAXIWAY E; CONSTRUCT GA APRON,
AVGAS FUELING APRON AND AUTO PARK 100

AIP PROJECT NO. 3-17-0140-B38
ILLINOIS PROJECT NO. LOT-3441

MARCH 25, 2005



Hanson Professional Services Inc.
815 Commerce Drive, Suite 200
Oak Brook, Illinois 60538
630.990.3800

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**SPECIAL PROVISIONS
CHICAGO-ROMEORVILLE AIRPORT (LOT)
EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK**

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102	Item 754	Concrete Gutters, Ditches and Flumes
103	Item 800914	High-Mast Apron Area Lighting
111	Item 800925	CA-3 Aggregate Backfill
114	Item 800926	CA-6 Aggregate Backfill
117	Item 800991	PCC Utility Trench
119	Item 800993	Bollard
120	Item 901	Seeding
124	Item 905	Topsoiling
126	Item 908	Mulching

SPECIAL PROVISIONS**CHICAGO-ROMEORVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-3441**GENERAL

These Special Provisions, together with applicable Standard Specifications, Supplemental Specifications, Recurring Special Provisions, Policy Memorandums, Rules and Regulations, Contract Requirements for Airport Improvement Projects, Payroll Requirements and Minimum Wage Rates, which are hereto attached or which by reference are herein incorporated, cover the requirements of the State of Illinois, Department of Transportation (IDOT), Division of Aeronautics (Division) for the following improvement project at Chicago-Romeoville Airport, Romeoville, Will County, Illinois:

☐ Extend Taxiway E; Construct GA Apron, AVGAS Fueling Apron and Auto Park 100

including, among other incidental work, the following items:

- ❖ Excavation, including Topsoil Removal, Soil Stabilization and Embankment Construction.
- ❖ Construction of New and Extension of Existing Storm Sewer Pipe System and Underdrain Pipe System.
- ❖ Construction and Marking of Taxiway E Extension, GA Apron, and Auto Park 100; Bituminous Pavement.
- ❖ Construction and Marking of AVGAS Fueling Apron, Bituminous and P. C. C. Pavement.
- ❖ Installation of High-Mast and Area Lighting, including a New Secondary Power Distribution Panel.
- ❖ Topsoiling, Seeding and Mulching.
- ❖ Installation of Perimeter Fencing and Electric Sliding Gates - Additive No. 1.

GOVERNING SPECIFICATIONS AND RULES AND REGULATIONS

The Standard Specifications for Construction of Airports, Illinois Department of Transportation, Division of Aeronautics, adopted January, 1985, as revised, (Standard Specifications) shall govern the Project except as otherwise revised or noted (1) in the Supplemental Specifications and Recurring Special Provisions, Illinois Department of Transportation, Division of Aeronautics, adopted July 1, 2004 (Supplemental Specifications and Recurring Special Provisions), and (2) in these Special Provisions dated March 25, 2005. All references to IDOT Specifications refer to Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted January 1, 2002, as revised. Resolution of conflicts with any part or parts of said Specifications shall be in accordance with these Special Provisions, Section 30-03.

ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF AERONAUTICS
SUPPLEMENTAL SPECIFICATIONS, RECURRING SPECIAL PROVISIONS & POLICY MEMORANDUMS

The Illinois Department of Transportation, Division of Aeronautics has implemented Supplemental Specifications and Recurring Special Provisions, adopted July 1, 2004, and Policy Memorandums that govern all or a part of this Project. The Supplemental Specifications, Recurring Special Provisions and Policy Memorandums that are incorporated into this Project by reference are listed below. Also provided is a notation as to whether all or a portion of each applicable Supplemental Specification, Recurring Special Provision or Policy Memorandum has been modified by these Special Provisions, dated March 25, 2005.

Supplemental Specifications

<u>Section/Item</u>	<u>Title</u>	<u>Modified by Special Provisions</u>
10	Definition of Terms	No
20	Scope of Work	Yes
30	Control of Work	Yes
40	Control of Materials	Yes
50	Legal Relations and Responsibility to Public	No
60	Prosecution and Progress	Yes
70	Measurement and Payment	No
110	Installation of Airport Underground Electrical Duct	Yes
152	Excavation and Embankment	Yes
209	Crushed Aggregate Base Course	Yes
602	Bituminous Prime Coat	No
603	Bituminous Tack Coat	No
610	Structural Portland Cement Concrete	No
620	Pavement Marking	Yes
701	Pipe for Storm Sewers and Culverts	Yes
751	Manholes, Catch basins, Inlets and Inspection Holes	Yes
752	Concrete Culverts, Headwalls and Miscellaneous Drainage Structures	Yes
754	Concrete Gutters, Ditches and Flumes	No
908	Mulching	Yes

Recurring Special Provisions

<u>Section/Item</u>	<u>Title</u>	<u>Modified by Special Provisions</u>
156000	Erosion Control	Yes
156513	Separation Fabric	No
201002	Bituminous Base Course - Method II (over 2,500 tons/pay item/location)	Yes
401002	Bituminous Surface Course - Method I (over 2,500 tons/pay item/location)	Yes
401650	Bituminous Pavement Milling	Yes
401900	Remove Bituminous Pavement	Yes
501001	Portland Cement Concrete Pavement - Method I (less than or equal to 1,500 cubic yards)	Yes
605000	Silicone Joint Sealing Filler	No

Policy Memorandums

<u>No.</u>	<u>Title</u>	<u>Modified by Special Provisions</u>
04-03	Acceptance Procedure for Finely Divided Minerals Used in Portland Cement Concrete and Other Applications	No
87-2	Density Acceptance of Bituminous Pavements	No
87-3	Mix Design, Test Batch, Quality Control, and Acceptance Testing of PCC Pavement Mixture	No
87-4	Determination of Bulk Specific Gravity (D) of Compacted Bituminous Mixes	No
90-1	Resampling and Retesting of PCC Pavement	No
95-1	Field Test Procedures for Mixer Performance and Concrete Uniformity Tests	No
96-1	Item 610, Structural Portland Cement Concrete: Job Mix Formula Approval and Production Testing	No
96-2	Requirements for Laboratory, Testing, Quality Control, and Paving of Bituminous Concrete Mixtures	No
96-3	Requirements for Quality Assurance on Projects with Bituminous Concrete Paving	No
97-2	Pavement Marking Paint Acceptance	No
2001-1	Requirements for Cold Weather Concreting	No

DIVISION I - GENERAL PROVISIONS

SECTION 10

DEFINITION OF TERMS

The work shall be provided in accordance with Section 10 of the Standard Specifications and Supplemental Specifications.

SECTION 20

SCOPE OF WORK

Revise Section 20 of the Standard Specifications and Supplemental Specifications as follows:

20-05 MAINTENANCE OF TRAFFIC. Add the following paragraphs:

"A Construction Staging Plan detailing the sequencing of the Contractor's Work throughout the Project is included in the Plans. The Contractor shall provide his written acceptance of the Project Construction Staging Plan at the Pre-construction Conference. Any and all changes to the Construction Staging Plan that may be requested by the Contractor must be approved by the Project Engineer and the Airport Owner. It shall be the Contractor's responsibility to provide sufficient advance notice of any proposed staging change to permit consideration and approval by the Project Engineer and the Airport Owner. The Contractor shall not be entitled to any extra compensation nor extension to the Contract time because of a staging change request nor for any time necessary in receiving the required approvals.

"At the Pre-construction Conference, the Contractor shall provide a Construction Coordination Plan that coordinates his Work in each sequence with the work of his Subcontractors and the work of other contractors of other Airport projects.

"The Contractor shall not have access to any part of the active airfield (runways, taxiways or aprons) for any equipment or personnel without the approval of the Resident Engineer and the Airport Owner. All Contractor activities shall remain more than 250 feet from the runway centerline and 700 feet from the runway end. For work near taxiways and aprons, the Contractor's personnel and equipment must remain outside the distances shown on the Staging Plan from the centerline of active taxiways and the edge of active aprons. When construction operations must be conducted within these limits, the pavement must be closed to aircraft activity by the Contractor by providing temporary barricades as shown in the Plans, and in the case of runway pavements, closed runway markers.

"The Contractor shall keep all of his equipment and personnel at least 15 feet from the edge of any active roadway or auto parking pavement. When his activities require working within 15 feet of the road/pavement edge, the Contractor shall close the roadway or auto parking area to traffic by providing temporary barricades and cones and traffic control signs as directed by the Resident Engineer.

"The Contractor must notify the Resident Engineer and the Airport Owner 72 hours in advance of any required partial or complete closing of any public road, Airport road, runway, taxiway or apron, or lighting circuit, utility, or other Airport operational facility."

SECTION 30

CONTROL OF WORK

Revise Section 30 of the Standard Specifications and Supplemental Specifications as follows:

30-12 LOAD RESTRICTIONS. Add the following:

“Contractor’s use of the existing airfield and roadway pavements by equipment and loaded trucks shall be minimized. The Contractor shall utilize the access ways shown on the Plans or as approved by the Airport Owner and the Resident Engineer. The Contractor shall erect and maintain, at no cost to the Contract, directional and informational signs at the Contractor’s access routes as noted on the Plans. Any damage to existing Airport pavements shall be repaired by the Contractor at his own expense and to the satisfaction of the Airport Owner and the Resident Engineer.

“The Contractor shall acquaint himself with the load restrictions of all local streets, roadways and highways intended for use as access/haul roads.”

SECTION 40

CONTROL OF MATERIALS

Revise Section 40 of the Standard Specifications and Supplemental Specifications as follows:

40-05 RESIDENT ENGINEER'S FIELD OFFICE. Add the following:

“The Contractor will be required to furnish and maintain a Resident Engineer’s Field Office throughout the Project, in accordance with Item 150 ARI 50510 ENGINEER’S FIELD OFFICE.”

SECTION 50

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

The work shall be provided in accordance with Section 50 of the Standard Specifications and Supplemental Specifications.

SECTION 60

PROSECUTION AND PROGRESS

Revise Section 60 of the Standard Specifications and Supplemental Specifications as follows:

60-09 FAILURE TO COMPLETE ON TIME. Add the following:

"The Construction Staging Plan as included in the Plans requires the completion of certain identified stages of work within specified numbers of calendar days. These limitations are necessary to minimize the adverse operational effects associated with the work. Failure to complete the staged work within the noted calendar day limits shall also be considered as an overrun in Contract time in the Contract time table for each day the stage limitation is exceeded, whether or not the entire work is completed within the overall Contract completion date."

SECTION 70

MEASUREMENT AND PAYMENT

The work shall be provided in accordance with Section 70 of the Standard Specifications and Supplemental Specifications.

ITEM 106512

TYPE A AREA LIGHT POLE WITH TWO FIXTURES

106512-1.1 DESCRIPTION. This item shall consist of the furnishing and installation of area light poles with 2 fixtures per pole at the fuel dispenser island area, complete, in place, in accordance with the details shown on the Construction Plans.

Included in this item shall be all excavation, backfilling, and restoration required for the construction of the concrete foundation, the furnishing of all materials (including forms) necessary for the concrete foundations, including anchor bolts, reinforcing, and conduit, the furnishing and installation of the light pole, transformer base, light fixtures, ballasts, lamps, mounting bracket, conduit fittings, ground rod, connections and ground wire, all wiring from the pole base to the respective light fixtures, fusing, and surge arresters, all electrical connections, the testing of the installation, and all other incidentals necessary to place the lights in operation to the satisfaction of the Resident Engineer. The lighting controller shall be paid for separately under Item AR109400 Secondary Power Distribution. The cable in unit duct and/or conduit from the lighting controller to the light poles will be paid for under Item 108 and Item 110.

106512-2.1 MATERIALS.

- a. Steel: All steel used in the construction of this item shall be domestically produced and the Contractor shall provide the Resident Engineer a statement certifying to this fact.
- b. Luminaires: The pole shall have shoebox type architectural area light with appropriate arms and adapters to mount on the pole. The luminaire shall be 400 Watt high pressure sodium lamp with a quad-voltage (120/208/240/277 VAC) ballast. The luminaries will have and IES Type "3" segmented optics and shall have a dark bronze powder-coated finish. Luminaires shall be UL Listed and suitable for use in wet locations. Luminaires shall be as indicated on the fixture schedule on the Plans, or an approved equivalent. Each luminaire's ballast shall have individual double fuse kits and surge arresters installed at the base of the pole. Fuses shall be the size and type as recommended by the respective luminaire manufacturer. All luminaires will be equipped with all hardware necessary for mounting to the pole as indicated by the details on the Plans.
- c. Lamps: All lamps shall be 400 Watt high pressure sodium as detailed on the Plans. One spare lamp shall be provided for each luminaire. Lamps shall be installed by the Contractor, just prior to testing the system, to reduce the possibility of breakage. Broken lamps shall be replaced at no additional cost to the contract. Spare lamps shall be turned over to the Airport Manager.
- d. Ballasts: Ballasts shall be operable at 120/208/240/277 VAC, 1 phase, 60 Hz, and be capable of starting the lamps indicated herein down to a temperature of -20 degrees Fahrenheit. Ballasts shall be of the high power factor constant wattage autotransformer type. Ballasts shall be an integral but easily replaceable part of the luminaire.

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-344I

- e. Light Poles: The proposed roadway light poles shall be 35-foot tall square tapered steel, hollow core with anchor base mounting. The poles shall be provided with a handhole located approximately 18 inches above the pole base. The handhole shall include cover and ground lug and shall be of adequate size to permit access for splicing wires and installing and maintaining an in-line fuse and surge arrester in the pole base. Minimum size of the handhole shall be 4" by 6.5". Anchor bolts, nuts, washers, and bolt circle presswood template shall be included with each pole. Pole and luminaire assembly shall withstand steady 100 mph winds with 1.3 gust factor, with an EPA of 2.5 times the total EPA of the two respective luminaires. The minimum wall thickness shall be 7 gauge and shall be increased as necessary to satisfy the design loading requirements. Poles shall be suitable for mounting the fixtures as detailed on the Plans. The poles shall be equipped with a vibration-dampener. Poles shall have a dark bronze powder-coated finish to match luminaires.

The poles shall be as specified in the fixture schedule on the Plans with vibration-dampener, or an approved equal.

Contractor shall be responsible to verify compatibility of the lighting system luminaires, support brackets, mounting hardware, and poles.

- f. Transformer Bases: Transformer bases shall be suitable for use with the respective pole, manufactured of steel, as detailed on the Plans. Transformer bases are required to accommodate the installation of an explosion proof conduit seal-off fitting. Transformer base shall have a dark bronze powder-coated finish to match the pole and luminaires.
- g. Light Pole Foundations: Foundations shall be as detailed on the Plans. Reinforcing steel shall be installed as detailed on the Plans.

Anchor bolts shall be supplied by the pole manufacturer and shall be installed according to his recommendations for the respective pole. Anchor bolts shall be "L" shaped and shall be minimum 1.00" diameter, 36" long with 4" ell (hook) unless otherwise recommended by the pole manufacturer. Anchor bolts shall conform to the pole manufacturer's recommendations.

The poles shall be erected vertically on a concrete foundation. The contractor shall furnish and install leveling and locking nuts and required washers for mounting and plumbing the poles on the anchor bolts. All of the above hardware shall be galvanized steel. After the entire assembly has been aligned and plumbed, a grout mixture shall be forced under the base casting so that after curing, the grout will be in contact with the bottom of the base at all points. The anchor bolts and installation template shall be furnished with the poles.

Contractor shall coordinate the installation of two 2-inch galvanized rigid steel conduit elbows for power cable entrance, and one 3/4-inch or 1-inch schedule 40 or 80 PVC conduit for the grounding electrode conductor entrance.

Concrete foundation, construction and materials shall conform to the applicable sections of Item 610. **The concrete mix design must be approved by the Division of Aeronautics prior to installation.**

SPECIAL PROVISIONS**CHICAGO-ROMEDEVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-344I**

- h. Luminaire Fusing: Luminaire fusing shall be provided at the handhole at the base of the light pole. Fuses shall be the size and type as recommended by the luminaire manufacturer for the respective light fixture, and shall be installed in double pole in-line fuse holders, Bussmann HEY, or equivalent. Each luminaire shall be provided with separate individual fusing. Wiring runs from the base of the pole to the fixtures shall be # 10 THWN or # 10 USE minimum.
- i. Lightning Arrester for Pole Lights: An AC surge protector shall be furnished and installed in the base of each light pole, and wired in series with each respective light fixture's circuit. Surge protectors shall be suitable for use on a 208 VAC or 240 VAC, 1 phase, 2 wire system, with ground. Surge protectors shall be Edco, Inc. of Florida Model SHA 2403 or Ditek Model DTK-DL240. Install per manufacturer's directions.
- j. Ground Rods: Ground rods shall be 3/4-inch diameter by 10-foot long UL Listed copper clad ground rods with 10-Mil minimum copper coating. Connections to ground rods shall be exothermic weld, Cadweld by Erico Products, Inc., Solon, Ohio or Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma.
- k. Galvanized rigid steel conduit: All galvanized rigid steel conduit and couplings shall conform to Federal Specification WW-C-581 and conform to Item 110; conduit and fittings shall also conform to the requirements of UL 6 and UL 514B.
- l. Explosion-Proof Conduit Seal-Off Fittings: Explosion-proof conduit seals shall be listed suitable for use in Class I, Division 1, Group D hazardous location. Explosion-proof conduit seals shall be Crouse-Hinds EYS or EZS Series, Appleton EYS, ESU, or EY Series, O-Z/Gedney EYA, EY, EZS Series explosion-proof sealing fitting, or approved equal.
- m. Schedule 40 PVC Conduit: Schedule 40 PVC conduit shall comply with Item 110 and the following:

Conduit shall be Schedule 40 PVC, 90°C, UL-rated or approved equal. Material shall comply with NEMA Specification TC-2 (Conduit), (Fittings UL-514), and UL-651 (Standard for rigid nonmetallic conduit). The conduit and fittings shall carry a UL label (on each 10 ft length of conduit and stamped or molded on every fitting). Conduit and fittings shall be identified for type and manufacturer and shall be traceable to location of plant and date manufactured. The markings shall be legible and permanent. The conduit shall be made from polyvinyl chloride C-300 compound that includes inert modifiers to improve weather ability, heat distortion. Clean reworked material, generated by the manufacturer's own conduit production, may be used by the same manufacturer, provided the end products meet the requirements of this Specification. The conduit and fittings shall be homogenous plastic material free from visible cracks, holes, or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks, or other imperfections which could mar conductors or cables. Conduit fittings and cement shall be produced by the same manufacturer to assure system integrity and shall be Carlon Plus 40 conduit or equal.

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-344I

CONSTRUCTION METHODS

106512-3.1 GENERAL. The Contractor shall furnish and install all materials necessary for complete installation of the roadway light pole and fixture, as stipulated in this Special Provision and as shown on the Plans.

The complete installation and wiring shall be done in a neat, workmanlike manner. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the National Electrical Code (most current issue in force) and all other applicable local codes, laws, ordinances, and requirements in force. Electrical equipment shall be installed in conformance with the respective manufacturer's directions and recommendations for the respective application. Any installations, which void the UL listing, ETL listing, (or other third party listing) and/or the manufacturer's warranty of a device, shall not be permitted.

Contractor shall keep a copy of the latest National Electrical Code (NFPA 70) in force on site at all times during construction for use as a reference.

Contractor shall coordinate work and any power outages with the Airport Manager and the Resident Engineer. Any shutdown of existing systems shall be scheduled with and approved by the Airport Manager, prior to shutdown.

106512-3.2 INSTALLATION OF AREA LIGHTS. The Contractor shall furnish and install all necessary wire to make electrical connections between the light fixtures and the ballast terminals, and the ballast terminal and the feeder cables.

The concrete foundations to support the light poles shall each conform with the dimensions and details shown on the Plans and each be provided with four anchor bolts (1.00" rd. x 36" long with 4" ells/hooks, or as per the respective pole manufacturer's requirements), two 2-inch galvanized rigid steel conduit elbows for power cable entrance, and one 3/4-inch or 1-inch schedule 40 or 80 PVC conduit for the grounding electrode conductor entrance. The contractor shall furnish and install leveling and locking nuts and required washers for mounting and plumbing the pole. All mounting hardware shall be galvanized steel. After the entire assembly has been aligned and plumbed, a grout mixture shall be forced under the base casting so that after curing, the grout will be in contact with the bottom of the base at all points. The Contractor will be required to form the foundations to the lines and grades shown on the Plans or established by the Resident Engineer in the field. The anchor bolts and conduit elbows shall be secured in proper position and alignment prior to pouring concrete and extreme care should be exercised during pouring and finishing of concrete so as not to displace the anchor bolts and the conduit elbow. The conduit elbows imbedded in the concrete foundations shall be oriented so as to face the direction of the underground cable serving the light.

All exposed edges of the concrete foundations shall have a 3/4" bevel.

The contractor shall bond each pole to a ground rod with a #6 AWG bare stranded copper grounding electrode conductor. The equipment ground wire run with power conductors to the pole shall also be bonded to the pole. Include a # 10 THWN or # 10 USE equipment ground wire with the branch circuit conductors from the base of the pole to each light fixture. The resistance to ground of any part of the ground system shall not exceed 10 Ohms.

SPECIAL PROVISIONS**CHICAGO-ROMEDEVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-344I**

Install explosion-proof conduit seal off fittings in conformance with the manufacturer's instructions. Per Article 501.15 (C) (6) of the 2005 NEC and UL Standard 886, the cross sectional area for conductors installed in a conduit seal off fitting shall not exceed 25 percent, unless the conduit seal off fitting has been specifically approved for a higher percentage of fill.

The installation shall be tested in operation as a completed unit prior to acceptance. Tests shall include resistance, voltage and current readings, as required by the Resident Engineer. The contractor shall furnish all testing equipment. Tests shall be conducted as directed by the Resident Engineer and shall be to his satisfaction. The Contractor shall be responsible for all equipment and materials furnished under this contract and for equipment and conduit in place, which will be connected to the new equipment, and any equipment or materials found to be defective or damaged shall be replaced by the Contractor at his own expense.

METHOD OF MEASUREMENT

106512-4.1 METHOD OF MEASUREMENT. Light pole foundation, light pole, transformer base, luminaire and all other incidentals will be measured as one unit as actually installed and accepted and as tested in accordance with Section 106512-4.1 above. Testing is considered incidental to all electrical items installed and no other compensation will be allowed.

BASIS OF PAYMENT

106512-5.1 BASIS OF PAYMENT. This item will be paid for at the Contract unit price bid per each Type A Area Light Pole with 2 Fixtures, which price and payment shall constitute full compensation for furnishing and installing the light pole with transformer base, fittings, luminaires with lamps, ballasts, brackets, and braces; for all excavation, backfilling and restoration required for the construction of the concrete foundations; for furnishing all materials including forms necessary for construction of the concrete foundations complete with anchor bolts, conduit elbows, and conduit fittings; for furnishing and installing the grounding system, lightning arrester, and fusing, for all wiring at the pole and light fixtures; for making all electrical connections; for testing the installation; and for all other incidentals necessary to place the lights in operation to the satisfaction of the Resident Engineer.

The lighting controller shall be paid for separately under Item AR109400 Secondary Power Distribution.

The cable in unit duct and/or conduit from the lighting controller to the light poles will be paid for under Item 108 and Item 110.

Payment will be made under:

Item AR106512 Type A Area Lgt Pole w/2 Fixtures - per each.

ITEM 108

INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS

Revise Item 108 of the Standard Specifications as follows:

108-1.1 DESCRIPTION. Delete the last sentence and insert the following:

"This item of work shall consist of the installation (plowing, trenching, or directional boring) of 600 Volt cables in unit duct, duct bank, duct and/or conduit at the locations shown on the Plans and in accordance with these specifications. This item shall include "cable in duct" and "cable in unit duct" where noted on the Plans and specified herein.

"In areas where there is a congestion of buried cable or where the proposed cable crosses an existing cable, the Contractor will be required to trench the proposed cable into place. In all other areas, the Contractor has the option to either trench or plow the proposed cable in unit duct into place. The trenching or plowing of this cable will be considered incidental to the Contract unit price of the proposed cable and no additional compensation will be allowed.

"When crossing existing circuits, the Contractor will be required to hand dig the trenches for the proposed cable."

MATERIALS

108-2.1 GENERAL. Add the following.

"All cable shall be UL listed as suitable for installed application."

108-2.2 CABLE. Revise this section to read as follows:

"L-824 Cable - L-824 cable shall be FAA L-824, Type C and shall conform to the requirements of FAA Advisory Circular 150/5345-7E, (or latest edition) "SPECIFICATIONS FOR L-824 UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS". Circuits for use with constant current regulator outputs (runway or taxiway lighting circuits) shall use 5000 Volt rated cable. Circuits for voltage applications of 600 Volts or less shall use 600 Volt or 5000 Volt rated cable.

"THWN Wire – Cable shall comply with Underwriters' Laboratories Standard UL-83 and Federal Specification A-A-59544. Conductor shall be soft annealed uncoated copper and shall comply with ASTM B3 and B8. Insulation shall be rated for 600V. Insulation shall be polyvinyl-chloride conforming to Underwriters' Laboratories requirements for Type THW. The outer covering shall be nylon conforming to Underwriters' Laboratories for type THHN or THWN. Cable shall be UL-listed and marked THWN. Power and control wiring shall be Superior Essex or Southwire Company Type THWN, or approved equal.

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-3441

"XLP-USE Wire – Cable shall comply with UL Standard 44, UL Standard 854, and Federal Specification A-A-59544. Conductor shall be concentric strand soft copper, conforming to ASTM B8 and Underwriters' Laboratories Standard UL44 for Rubber Insulated Wires. Insulation shall be rated for 600V. Insulation shall be cross-linked polyethylene conforming to Underwriter's Laboratories Requirements for Type USE-2 insulation. Cable shall be UL listed and marked USE-2. Cable shall be Service Wire Company Type USE-2, or approved equal.

"XHHW Wire. Cable shall comply with UL Standard 44, ICEA S-95-658/NEMA WC70 and Federal Specification A-A-59544. Conductors shall be Class B stranded annealed uncoated copper per UL Standard 44. Insulation shall be rated for 600V. Insulation shall be cross-linked polyethylene complying with the physical and electrical requirements of UL Standard 44 for Type XHHW-2. Cable shall be UL listed and marked XHHW-2. Service conductors shall be Service Wire Company or Southwire Company, Type XHHW-2, or approved equal.

"The Contractor shall color code all power cables in ducts and handholes. Color codes shall be as detailed herein. All costs of color coding shall be considered incidental to the Contract unit price for the associated item.

"Item AR108608, 3/C #8 600 V UG Cable shall consist of 3-1/C #8 AWG, XLP-USE, 600 volt cable installed in conduit or duct. Conductor insulation shall be color coded Phase A - Black, Phase B - Red, and Ground - Green. Conduit shall be paid for separately under Item 110. **The item is to be used in Circuit 3.**

"Item AR800916 Pole No. 1 Cables in Unit Duct shall consist of 5-1/C #8 AWG, XLP-USE, 600 volt cable in unit duct (1.25 inch or sized larger as required per NEC). Conductor insulation shall be color coded Phase A - Black, Phase B - Red, Phase C - Blue, Neutral - White, and Ground - Green. **The item is to be used in Circuit 1.**

"Item AR800917 Pole No. 2 Cables in Unit Duct shall consist of 3-1/C #2 AWG, XLP-USE and 2-1/C #6 AWG, XLP-USE 600 volt cable in unit duct (2 inch or sized larger as required per NEC). #2 AWG conductors shall be 208 VAC Phase A and B circuit conductors with ground. #6 AWG conductors shall be 120 VAC Phase C and Neutral circuit conductors. Conductor insulation shall be color coded Phase A - Black, Phase B - Red, Phase C - Blue, Neutral - White, and Ground - Green. **The item is to be used in Circuit 2.**

"Item AR800918 Pole No. 3 Cables in Unit Duct shall consist of 3-1/C #8 AWG, XLP-USE, 600 volt cable in unit duct (1.25 inch or sized larger as required per NEC). Conductor insulation shall be color coded Phase A - Black, Phase B - Red, and Ground - Green. **The item is to be used in Circuit 3.**

"Item AR800922 Electric Gate Cables in Unit Duct shall consist of 4-1/C #8 AWG, XLP-USE, 600 volt cable in unit duct (1.25 inch or sized larger as required per NEC). Conductor insulation shall be color coded Phase A - Black, Phase B - Red, Phase C - Blue, and Ground - Green. **The item is to be used in Circuits 4 and 5.**

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-3441

"Item AR800990 Power Cables in Duct shall consist of 4-1/C #3/0 AWG, XHHW and 1/C #6 Ground, 600 volt cable in 3-inch Schedule 40 PVC conduit. All bends and where conduit emerges from grade shall be galvanized rigid steel conduit. Conduits shall conform to the requirements of Item 110. Conductor insulation shall be black in color for phase and neutral conductors and identified with colored tape at all points of access. Color coding shall be Phase A - Black, Phase B - Red, Phase C - Blue, Neutral - White. Conductor insulation for the ground conductor shall be green in color. **The item is to be used in Circuit 6.**

"All other wiring associated with the secondary power distribution and control center shall be the type and size as shown on the Plans and shall be considered incidental to Item AR109400 Secondary Power Distribution - per lump sum."

108-2.3 BARE COPPER WIRE (Counterpoise). Revise this section to read:

"Bare copper counterpoise wire will not be required on this Project under Item 108."

108-2.4 CABLE CONNECTIONS. Delete paragraphs (b) and (e). Add the following to this section after the first paragraph:

"The cost of furnishing and installing all cable connections as specified shall not be paid for separately but shall be included in the cost of the cable.

"The Contractor will use a cable stripper/penciller whenever cable connections are made.

"All breaks in the unit duct shall be sealed by shrink kits.

"All below grade splices in new cables shall be installed in splice cans. Splice cans shall be L-867, Class I, Size B (12-inch diameter), 24-inch deep with 1/2 inch thick steel cover. Larger size splice cans shall be provided as applicable, for specific equipment applications or manufacturer's recommendations, and/or where detailed on the plans. Splice cans located in areas subject to heavy aircraft or vehicle loading shall be L-868 type. The Resident Engineer shall approve all splice locations before work commences."

Add the following paragraph after subparagraph (e):

"(f) Heat Shrink Tubing: On all connections, only waterproof connectors will be used, installed in accordance with the manufacturer's installation recommendations. Each waterproof splice shall be further protected by applying heat shrinkable tubing with interior adhesive shall be applied over all cable connections. **One-piece** heat shrink kits that cover the entire waterproof connector kit shall be used. Two layers of electrical tape shall be wrapped around the connection before the heat shrinkable tubing is installed. The heat shrinkable tubing will be as manufactured by 3M, Scotch or equal."

Add:

108-2.6 UNIT DUCT. Unit duct shall be as described under this item.

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The duct shall comply with NEMA Standards Publication No. TC7-1990, Part 4, ASTM D3485, and ASTM D1248, with additions, options and exceptions as detailed herein. The duct shall be annealed during the extrusion process. The duct shall be manufactured from black, virgin, high-density polyethylene resin designated as Type III, Grade P34, and Class C, Category 5 material in accordance with ASTM D1248.

Standard sizes of smooth wall polyethylene duct shall conform to the dimensional requirements specified below:

<u>Nominal Duct Size</u>	<u>Nominal Inside Diameter</u>	<u>Nominal Standard Wall</u>	<u>Nominal Outside Diameter*</u>
3/4"	0.910"	0.070"	1.050"
1"	1.145"	0.085"	1.315"
1-1/4"	1.440"	0.110"	1.660"
1-1/2"	1.650"	0.125"	1.900"
2"	2.065"	0.155"	2.375"
2-1/2"	2.449"	0.213"	2.875"
3"	3.048"	0.226"	3.500"
4"	4.000"	0.250"	4.500"

* Dimensions include allowance for duct eccentricity.

Dimensional measurements shall be performed on samples removed from each complete length of finished duct. The manufacturer shall have the capability to manufacture a composite wire/cable-in-duct system, wherein the wire and cables are placed in the polyethylene duct without sticking during the extrusion process. The open ends of each length of reeled flexible duct shall be sealed by plastic caps to prevent the entrance of dirt and water. The duct shall have a durable identification, which shows the manufacturer's name and/or trademark, all at intervals not to exceed ten (10) feet.

The manufacturer shall furnish copies of certified test reports on duct. The unit duct shall be Cablecon, as manufactured by Dura-Line Corporation, or approved equal.

Add:

108-2.7 CABLE PLOWING EQUIPMENT. At the Contractor's option cable in unit-duct may be installed in trench or using cable plowing equipment.

The plowing equipment shall be of the vibratory type. It shall vibrate at a rate of at least 1200 cycles per minutes. The vibrating unit shall not be rigidly mounted on the tractor. It shall be connected to the tractor for towing, in such a manner that the tractor will not dampen the vibrations.

The plow blade shall be a sufficient length to facilitate installation of the unit duct at the specified depth. The shoe throat shall be sized for the unit duct size. Cable way and cable guides shall be smooth, free of obstructions and sharp edges and shall not cause bending of the unit duct at shorter than 3-inch radius. It also shall not cause excessive cable strain, which may damage cable insulation or stretch the conductor.

Where two or more unit ducts are installed in a single operation, the plow shall be equipped with separate feeds, one for each unit duct, to provide the specified separation.

CONSTRUCTION REQUIREMENTS

108-3.1 GENERAL. Add the following:

"All airfield lighting and lighting power circuits are considered critical. It is, therefore, imperative that the Contractor carefully review the Plans showing lighting layouts, the proposed location of cable runs, and delineate the locations of existing cable.

"Only continuous lengths of cable will be allowed from light to light, electrical handhole to point-of-connection or point-of-connection to point-of-connection.

"Only cable in unit duct may be plowed.

"Care shall be taken so as not to damage any existing circuits. Any existing circuits damaged shall be immediately repaired to the satisfaction of the Engineer and/or the respective utility or owner where applicable. Any repairs of existing cables will be considered incidental to the Contract and no additional compensation will be allowed.

"The cable quantities shown in the Plans are from straight line measurement and do not consider any vertical distances or runs within the power panel and the light poles, nor do the quantities include the required cable slack as stated in Section 108-3.4, or any waste.

"At base mounted lights, the unit duct will be inserted at least three (3) inches inside each of the lights' two six (6) inch conduit extensions and then the end of the conduit will be sealed using a heat shrink connection.

"If the Contractor desires to lay cable on a line other than that shown on the Plans, he shall obtain approval from the Project Engineer. Any additional cable needed by such Contractor-requested change shall be at the Contractor's expense.

"New underground cable installed under this Project shall be marked so as to identify its associated circuit at all locations such as ducts, electrical manholes, etc. and when over other lighting cables in the same location. Means for this marking shall be approved by the Resident Engineer. The type of marking shall be recorded and given to the Airport Owner. The cost of this work shall be incidental to the cable.

"The unit duct shall be installed so that it is possible to withdraw a cable and pull-in a new replacement cable. Sweeping, long-radius bends shall be used; any runs with a kink or short radius bend will be rejected and replaced at the Contractor's expense."

I08-3.2 INSTALLATION IN DUCT OR CONDUIT. Add the following to this section:

"The proposed cable and unit duct shall be factory assembled and delivered to the site on reels.

"The unit duct will be run continuous through all ducts and conduits. The proposed cable that will be run through the conduit under the proposed concrete apron can eliminate the unit duct in this conduit."

I08-3.3 TRENCHING. Add the following to this section:

"Cable trenches shall be excavated to a minimum depth of 24 inches below the finished grade. Cable plowing shall be done at a minimum depth of 24 inches below the finished grade. Where shown otherwise on the Plans or specified herein cable trenches and/or cable plowing shall be at depths greater than 24 inches below finished grade."

I08-3.4 INSTALLATION IN TRENCHES. Delete the first paragraph and replace with the following:

"Except as described elsewhere in this item, the Contractor is permitted to use a cable plow for installing the cable. Should the Contractor elect to install the cable in trenches, he is permitted to use mechanical cable-laying equipment in conjunction with a trenching machine. If mechanical cable-laying equipment is used, it should provide for the physical inspection of cable prior to backfilling. Sharp bends or kinks in the cable shall not be permitted.

"At locations where proposed cable replaces an existing cable to be abandoned, the existing cable exposed during trenching and duct routing shall be removed from the trench or duct and disposed of. The cost of removing and disposing of the existing cable shall be considered incidental to the cost of the installed cable and no additional compensation will be allowed.

"Any and all trenches will be backfilled to a smooth grade to the satisfaction of the Resident Engineer. Areas disturbed during the installation of the proposed cable, which are not completed before the Contract seeding operations, will be fertilized and seeded. The fertilizing and seeding will be completed in accordance with Item 901, but will be incidental to this pay item."

I08-3.5 BACKFILLING. Add the following:

"Line marking tape shall be installed during the backfill process at a minimum depth of 6 inches and a maximum depth of 12 inches. Installation methods shall be to the satisfaction of the Resident Engineer. Line marking tape shall be color red, Terra Tape - Sentry Line 620, Detectable by Reef Industries, Inc. P. O. Box 750245, Houston, Texas 77275-0245, 1-800-231-2417, or equal."

I08-3.7 CABLE MARKERS. Add the following:

"The Contractor shall provide and install cable markers along the cable runs as described in this section."

108-3.8 SPLICING. Delete subparagraphs (b), (c), (d) and (e) and insert the following:

"Splices will not be allowed in new circuits unless otherwise approved by the Project Engineer. Any repairs necessary in the new cable after backfilling the trench or after plowing is complete and discovered during testing of the circuit, shall be repaired with the cast splice kit. The Contractor shall have a minimum of two (2) splice kits on the job site 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 specified in paragraph (a) of Item 108-2.4."

108-3.9 BARE COUNTERPOISE WIRE INSTALLATION AND GROUNDING FOR LIGHTNING PROTECTION. Revise this section to read as follows:

"Bare copper counterpoise wire will not be required on this Project under Item 108."

108-3.10 TESTING. Add the following paragraphs:

"All testing shall be in the presence of the Resident Engineer. Test equipment and power to conduct the tests shall be furnished and operated by the Contractor at no cost to the Contract. The equipment shall be approved by the Resident Engineer before testing.

"All cables found to be defective due to installation methods shall be replaced by the Contractor at his expense."

Add:

108-3.11 108-3.11 PLOWING-IN OF CABLE IN UNIT DUCT.

NOTICE: Plowing-in of unit duct does not relieve the Contractor of responsibility for repairing damage to existing cables cut as a result of the Contractor's operations, as described in Paragraph 108-3.1. Extreme care must be taken to locate all existing circuits in the working limits of the plowing operations before commencing the operation. The Contractor shall have the option of trenching-in cables as described in Paragraph 108-3.3, 108-3.4, 108-3.5, and 108-3.6 in lieu of plowing-in any sections so noted on the Plans – at no additional cost or time to the contract.

If the Contractor elects to plow the cable in unit-duct into place, his plowing operation must conform to the following requirements:

The forward moving speed of the plow shall be between 15 and 40 feet per minute. The plow shall be wide enough to freely allow the unit-duct to pass through it but not exceed the overall width of two inches.

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The unit duct shall be inserted into the plow in a manner that will not cause the unit-duct to bind, pull or break. The unit-duct shall be installed so that it is possible to withdraw a cable and pull in a new one. Sweeping long radius bends shall be used. Any run with a kink or short radius bend will be rejected. The cable in unit duct shall be installed continuous between lights without any splices in cable or unit duct. The holes for the transformer bases or at locations of cable termination shall be dug before the plowing operation is commenced. A method approved by the Engineer shall be used to prevent the walls of the holes from collapsing due to tractor and plow wheels.

The unit duct may be unreel along the proposed cable route before plowing or the unit duct reels may be mounted on the tractor. In the latter case, unreeling of the unit duct shall not cause excessive tension on the cable.

After the tractor and the plow are positioned at the beginning of the run, sufficient unit duct slack shall be pulled through the throats. Then the plow shall be lowered into the hole and the unit duct shall be hand held for the start of plowing. At each equipment hole the plow shall be stopped (movement and vibration), raised and the required amount of slack shall be hand pulled. Care shall be taken during the operation that the unit duct, at the entrance into the equipment hole, shall not be pulled from the specified depth. Plowing shall be continued by lowering the plow, starting it and holding the unit duct by hand until it is firmly held by the ground.

The plow shall not be backed onto the unit duct.

When an underground obstruction is encountered, the plow shall be lifted out of the ground. The obstruction shall be removed by hand digging. An opening shall be hand dug around the unit duct down to the depth of the unit duct and large enough to lower the plow, then the plow shall be lowered into the opening. While this is being done the unit duct shall be pulled back into the throat by hand to prevent kinks or sharp bends. In no case shall the unit duct be bent sharper than 3 inch radius, or be subjected to excessive tension.

After installation of unit duct by plowing, the disturbed earth at the surface shall be leveled and, if necessary, compacted by a device approved by the Engineer.

Ends of cable shall be taped immediately after cutting to prevent moisture from entering the cable. Where the cable is not expected to be connected for at least 72 hours, the tape shall also be varnished.

To identify routing of the unit duct, immediately after plowing stakes shall be installed every 200 feet along straight runs and at each curve. Later these stakes shall be replaced by regular concrete cable markers. Concrete markers shall be placed in areas not used for agricultural purposes (plowed fields).

Plow operators shall be experienced and qualified by schooling and/or by sufficient on the job training under an experienced operator. Proof of such qualification shall be required from the Contractor.

Add:

108-3.12 LOCATING OF EXISTING UNDERGROUND UTILITIES AND CABLES. The location, size, and type of material of existing underground utilities indicated on the Plans are not represented as being accurate, sufficient or complete. Neither the owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size and type of material of existing underground utilities indicated are representative of those to be encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Engineer shall also be immediately notified. Any such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract.

All utility cables and lines shall be located by the respective utility. Contact JULIE (Joint Utility Location Information for Excavation) for utility information, phone: 1-800-892-0123. Also contact the Resident Engineer and Airport Manager for assistance in locating underground airport cables and/or utilities.

The Contractor shall locate and mark all existing cables within ten (10) feet of the proposed excavation or plowing/trenching area. Any cables found interfering with the proposed excavation or cable plowing/trenching shall be hand-dug and exposed. Any damaged cables shall be immediately repaired to the satisfaction of the Resident Engineer and at the Contractor's expense. The Resident Engineer and the Airport Owner shall immediately be notified if any cables are damaged.

Payment for locating and marking underground cables will not be paid for separately but shall be considered incidental to the plowing/trenching of cable in unit duct.

METHOD OF MEASUREMENT

108-4.1 METHOD OF MEASUREMENT. Delete this Section in its entirety.

108-4.2 METHOD OF MEASUREMENT. Delete this Section in its entirety and replace with the following:

"108-4.2 METHOD OF MEASUREMENT. The footage of cable installed in trench, duct or conduit to be paid for shall be the number of linear feet of cable installed in trench, duct or conduit measured in place by direct measurement, completed, ready for operation and accepted as satisfactory with no allowance being made for overrun due to slack, turns, splices, etc. The Contractor shall take this into consideration in preparing his bid for the items concerned."

BASIS OF PAYMENT

108-5.1 Add the following:

"All plowing/trenching, hand-digging, exposing of existing cable ducts, backfilling, removal and disposal of existing cables, etc., shall not be paid for separately but shall be considered incidental to the Contract unit price for cables in duct or unit duct."

"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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished."

Delete the last sentence and insert the following:

"Payment will be made under:

Item AR108608,	3/C #8 600 V UG Cable - per linear foot.
Item AR800916	Pole No. 1 Cables in Unit Duct - per linear foot.
Item AR800917	Pole No. 2 Cables in Unit Duct - per linear foot.
Item AR800918	Pole No. 3 Cables in Unit Duct - per linear foot.
Item AS800922	Electric Gate Cables in Unit Duct - per linear foot.
Item AR800990	Power Cables in Duct - per linear foot."

ITEM 109400

SECONDARY POWER DISTRIBUTION

DESCRIPTION

109400-1.1 This Work shall include the installation of a concrete pad-mounted secondary power distribution panel enclosure and equipment at the location shown on and as detailed in the Plans and specified herein. The Work includes furnishing and installing new weatherproof enclosure on concrete foundation, circuit breaker panelboard with main breaker and branch/feeder breakers, surge arrester/transient voltage surge suppressor, lighting contactor, electronic time clock, selector switches, photocell, thermostat, humidistat, strip heater, ground bus, ground rods, terminal blocks, conduits, and wiring and furnishing and installing all incidentals as detailed in the Plans and as necessary to produce and place in operation a completed unit to the satisfaction of the Resident Engineer.

This item shall also include furnishing and installing a new electric service to provide power for the secondary power distribution panel. New electric service shall include cable, conduits, strut support and hardware, meter pedestal, service main breaker, labeling, utility coordination, and all associated grounding and equipment as required to provide a complete and operational electric service entrance installation as detailed on the Plans and specified herein.

MATERIALS

109400-2.1 SERVICE BREAKER. Service breaker shall be as detailed on the Plans.

109400-2.2 SECONDARY POWER DISTRIBUTION PANEL. Secondary Power Distribution Panel shall be as detailed on the Plans and Specified herein. Secondary Power Distribution Panel shall include the following components:

1. Enclosure: NEMA 4X stainless steel, single door with pad lock feature, pad mount enclosure as manufactured by APX Enclosures, Inc. 200 Oregon Street, Mercersburg, PA 17236, Phone: 717-328-9399, Fax: 717-328-2477, sized as detailed on the Plans, or approved equal. The enclosure shall be furnished with one padlock, Model Number 21B-1 1/2 inch bronze shackle, by Best Access Systems, with core keyed to the Owner's masterkey system.
2. Panelboard: 225 Amp, 208/120 VAC, 3 phase 4 wire, 42 circuit panelboard with 200 Amp, 3 pole main breaker as detailed on the Plans. Panelboard shall be provided with a main breaker and bolt-on branch/feeder circuit breakers of size and rating as detailed on the Plans. Breakers shall be 1, 2 or 3 pole with an integral crossbar to assure simultaneous opening of all poles in multiple pole circuit breakers. Breakers shall have an overcenter, trip-free, toggle-type operating mechanism with quick-make, quick-break action and positive handle indication. Handles shall have "ON," "OFF," and "TRIPPED" positions. Circuit breakers shall be UL-listed in accordance with UL Standard 489 and shall be rated 120/240 VAC for single pole and two pole breakers and shall be rated 240 VAC for 3 pole breakers.

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Panelboard bus structure and main lugs or main circuit breakers shall have current ratings as shown in the panelboard schedule. Such ratings shall be in accordance with UL Standard 67. Bus bar connections to the branch circuit breakers shall be the "distributed phase" or phase sequence type. All current carrying parts of the bus structures shall be plated. Panelboard bus assembly shall be enclosed in a NEMA 1 or NEMA 12 steel cabinet. Panelboard shall be UL-listed and bear the UL label. A circuit directory frame and card with a clear plastic cover shall be provided on door interior. Circuit directory shall be typed indicating each branch circuit of the panelboard. Revise directory to reflect circuiting changes as required.

3. Lighting Contactor: Lighting contactor shall be 30 Amp, 12 pole, mechanically held contactor with 120 VAC, 60 Hz coil, Square D Class 8903, Type LXO1200V02, or approved equal.
4. Surge Protective Device: AC power surge arrester/transient voltage surge suppressor shall be UL listed per UL 1449, second edition and shall conform to the applicable requirements of FAA-STD-019d dated August 9, 2002, "LIGHTNING AND SURGE PROTECTION, GROUNDING, BONDING AND SHIELDING REQUIREMENTS FOR FACILITIES AND ELECTRONIC EQUIPMENT". AC power surge arrester/transient voltage surge suppressor for the service panelboard shall be suitable for a 208/120 VAC, 3 phase, 4 wire plus ground system, with a surge current rating of 180,000 Amperes, 8 x 20 microsecond wave per mode, and status indication lights in a NEMA 12 rated enclosure, Lightning Protection Corporation Model LPC 2030-5U-G, or approved equal.
5. Two-position, maintained Contact Selector Switch, heavy duty, watertight/oil tight (NEMA 4/13) Square D Class 9001, Type KS11FBH13, or approved equal. Include legend plate labeled "PHOTOCELL-TIMER". Include mounting bracket for selector switch.
6. Three-position, maintained Contact Selector Switch, heavy duty, watertight/oil tight (NEMA 4/13) Square D Class 9001, Type KS43FBH13, or approved equal. Include legend plate labeled "AUTO-OFF-ON". Include mounting bracket for selector switch.
7. Control relay with socket shall be 2PDT or 3PDT with 115 VAC coil and 10 Amp rated contacts, as manufactured by Potter & Brumfield, Allen Bradley, Square D, Magnecraft, or approved equal.
8. Electronic Time Clock: Provide programmable digital time clock, 120 VAC, with 2 SPDT dry contacts rated 10 Amps at 120 VAC, Tork Model DGM100 or approved equal.
9. Photocell: Photocell for use with the control panel shall be rated 2000 Watts at 120 VAC, with off delay, -40° C to 60° C operating temperature range, Tork Model No. 2101, or approved equal. Contractor shall confirm the selected photocell is suitable for the respective application.
10. Thermostat: Thermostat shall be farm controller type, line voltage 120 VAC, 1 HP, corrosion resistant, Honeywell Model Number T631C1103, or approved equal.
11. Humidistat: Humidistat shall be line voltage 120 VAC with 7 Amp dehumidifier contacts, Honeywell Model Number H600A1014, or approved equal.

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12. Strip Heater: Provide a condensation strip type heater sized as required for the secondary distribution panel enclosure to minimize moisture that may accumulate inside the enclosure.
13. Ground Bus: Ground bus shall be 1/4" thick by 2" wide, by 12" long copper bus with standoff insulators and mounting brackets, Harger Catalog Number GB114212N, or approved equal. Ground bus shall include mounting hardware as required for the respective application.
14. Power Distribution Terminal Blocks rated for 60 Amps minimum and suitable for wire ranges from 12 AWG to #1 AWG, Square D Class 9080, Type GD6 or approved equal. Provide 24 terminal blocks minimum.
15. Control wiring shall be sized as required per NEC minimum 14 AWG type MTW, THW, or THWN copper. Terminal blocks for control wiring shall be 600 Volt with Amperage ratings in conformance with NEC Table 310-16 using 75 Degree C wire for the respective wire lug range, box lug type, Square D Class 9080, Type G or approved equal.
16. Convenience Receptacle: Include a ground fault circuit interrupter receptacle, duplex type, rated 120 VAC, 60 HZ, 20 Amps, specifications grade with NEMA 5-20R receptacle configuration and a trip threshold of 5 ± 1 milliamps. Ground fault circuit interrupter receptacles shall be UL Class "A" ground fault interrupter receptacle units complying with and tested in accordance with UL Standard No. 943. Ground fault circuit interrupter shall be as manufactured by Leviton, or equal, include junction box and cover plate.

109400-2.3 SERVICE, FEEDER, AND BRANCH CIRCUIT CABLE. Service, feeder, and branch circuit cables shall conform to Item 108 and as detailed on the Plans.

109400-2.4 JUNCTION AND PULL BOXES. Junction and pull boxes shall be sized as required for conductors and splices and per 2005 NEC Article 314. Boxes shall be UL-listed. Special boxes made to suit conditions shall be used to accommodate the respective application or where required by National Electrical Code even though they might not be indicated on the drawings. Surface mounted exterior junction and pull boxes located in non-hazardous, non-classified areas, shall be NEMA 4X stainless steel or aluminum, Crouse-Hinds, Killark, Hoffman, Hennessy, or equal. All junction and pull boxes installed in classified hazardous areas (Class 1, Division 1 or 2, Group D) shall be NEMA 7 and NEMA 4 and shall comply with applicable provisions of the NEC including, but not limited to, Articles 500 and 501.

109400-2.5 GALVANIZED RIGID STEEL CONDUIT. All galvanized rigid steel conduit and couplings shall conform to Federal Specification WW-C-581 and conform to Item 110. Conduit and fittings shall also conform to the requirements of UL 6 and UL 514B.

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109400-2.6 SCHEDULE 40 PVC CONDUIT. Schedule 40 PVC conduit shall comply with Item 110 and the following: Conduit shall be Schedule 40 PVC, 90°C, UL-rated or approved equal. Material shall comply with NEMA Specification TC-2 (Conduit), (Fittings UL-514), and UL-651 (Standard for rigid nonmetallic conduit). The conduit and fittings shall carry a UL label (on each 10 ft length of conduit and stamped or molded on every fitting). Conduit and fittings shall be identified for type and manufacturer and shall be traceable to location of plant and date manufactured. The markings shall be legible and permanent. The conduit shall be made from polyvinyl chloride C-300 compound that includes inert modifiers to improve weather ability, heat distortion. Clean reworked material, generated by the manufacturer's own conduit production, may be used by the same manufacturer, provided the end products meet the requirements of this specification. The conduit and fittings shall be homogenous plastic material free from visible cracks, holes, or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks, or other imperfections, which could mar conductors or cables. Conduit fittings and cement shall be produced by the same manufacturer to assure system integrity and shall be Carlon Plus 40 conduit or equal.

109400-2.7 LIQUID-TIGHT FLEXIBLE METAL CONDUIT. Liquid-tight flexible metal conduit shall consist of polyvinyl jacket over flexible hot dip galvanized steel tubing. The flexible conduit shall be completely sealed from liquids, dust, dirt and fumes; and be resistant to oil, gasoline, grease, and abrasion. Jacket shall also be sunlight resistant. Liquid-tight flexible metal conduit shall be UL-listed, suitable for use as a grounding conductor, and comply with Article 350 of the NEC. Liquid tight flexible metal conduit shall be Anaconda Sealtite Type UA as manufactured by Ananmet Electrical Inc., 1000 Broadway East, Mattoon, IL 61938-0039, Liatatite Type LA as manufactured by Liatatite 222 W. Central Ave., Roselle, IL 60172, or approved equal.

109400-2.8 GROUND RODS. Ground rods shall be 3/4-inch diameter, 10-foot long, UL-listed, copper clad with 10-mil minimum copper coating.

109400-2.9 CONCRETE. Concrete associated with the equipment support structures and foundations shall meet materials and quality requirements of Item 610, providing a 14-day compressive strength of 3,500 psi.

109400-2.10 LEGEND PLATES. Legend plates shall be required for all panelboards, load centers, safety switches, circuit breakers, disconnects, control panels, etc. Legend plates shall be provided to identify the equipment controlled, the power source, and the function of each device. Legend plates shall be weatherproof and abrasion resistant phenolic material. Lettering shall be black letters on a white background, unless otherwise noted.

CONSTRUCTION METHODS

109400-3.1 LOCATE EXISTING UNDERGROUND UTILITIES AND CABLES. The location, size, and type of material of existing underground utilities indicated on the Plans are not represented as being accurate, sufficient or complete. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans and shall obtain from the respective utility companies detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment where required.

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In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Resident Engineer and Airport Owner shall also be immediately notified. Any such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract.

Contact JULIE (Joint Utility Location Information for Excavation) for utility information, phone: 1-800-892-0123. Also contact the Airport Manager and/or respective airport personnel for assistance in locating underground airport cables and/or utilities.

109400-3.2 ELECTRICAL. The Contractor shall furnish and install all electrical materials necessary for complete and operational installation of the secondary power distribution system as shown on the Plans and specified herein. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the National Electrical Code (most current issue in force). Electrical equipment shall be installed in conformance with the respective manufacturer's directions and recommendations for the respective application. Any installations which void the UL listing, ETL listing, (or other third party listing), and/or the manufacturer's warranty of a device shall not be permitted.

The Contractor should examine the proposed site to evaluate the complexity of the work.

Contractor shall coordinate work and any power outages to buildings located on the airport with the Airport Manager/Director and/or the respective building personnel. Contractor shall coordinate work and any power outages to airfield lighting systems with the Resident Engineer and the Airport Owner.

The Contractor shall be responsible for furnishing and setting all anchor bolts required to install his equipment.

Where concrete mounting pads, foundations, or piers are required for equipment mounting, the Contractor shall furnish all concreting and form work necessary to complete the installation. Concrete shall conform to Item 610.

109400-3.3 ELECTRIC SERVICE ENTRANCE. Contractor shall furnish and install electric service entrance as detailed on the Plans and specified herein. As part of the service entrance work, the Contractor shall coordinate with the serving electric utility, (Commonwealth Edison Company, New Electric Service Department, Phone: 866-639-3532 and Commonwealth Edison Company, 1910 South Briggs Street, Joliet, Illinois 60433, Attn. Ms. Kriesna Kirkland, Service Engineer, Phone: 815-724-5805) the installation of a 208Y/120 VAC three-phase, 4-wire underground service sufficient to handle a 200-amp service. **The Airport Authority will pay for all associated electric utility company charges required to provide electric service to the respective service disconnect. The Contractor is not responsible for electric utility company charges associated with the proposed electric service to the respective service disconnect.** Contractor shall coordinate the new electric service with the serving electric utility company and the Resident Engineer. The service entrance shall include, but not be limited to, all service entrance equipment, labor and materials as detailed on the Plans and specified herein, in order to provide a complete and operational electrical system.

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- a. Electric Utility Company: Major work items to be performed by the serving electric utility company (not in contract) shall be as follows:
 1. The furnishing of power for a 208Y/120 VAC, three-phase, 4-wire secondary service sufficient to handle the loads for a 200 Amp service.
 2. The furnishing and installing of the meter.
 3. Connecting the customer's service entrance conductors to the secondary side of the transformer.
 4. The serving electric utility company shall retain the right to review and approve drawings prior to installation.

- b. Contractor: Major work items to be performed by the Contractor (in contract) shall be as follows: (All work, labor, equipment, and materials shall be as detailed on the Plans specified herein, and per the serving electric utility's requirements, where applicable.)
 1. Furnishing and installing a meter pedestal per the serving electric utility requirements.
 2. Furnishing and installing service entrance conduit.
 3. Furnishing and installing service entrance conductors.
 4. Furnishing and installing the service entrance main breaker.
 5. Furnishing and installing ground conductors, ground rod(s), and grounding electrode conductor conduit.
 6. Verifying all requirements with serving electric utility.
 7. Additional work as required by the serving electric utility and as required to provide a complete and operational electric service entrance system.

109400-3.4 PANELBOARD INSTALLATION. Install panelboards as shown on the Plans and in accordance with NEMA PBI.1. Install panelboards plumb. Install circuit breakers in panelboard in conformance with the respective manufacturer/s directions. Connect only one wire/cable to each breaker terminal. Provide filter plates for unused spaces in panelboards. Provide typed circuit directory to identify each branch circuit in the panelboard. Revise directory to reflect circuiting changes as required. Provide legend plates for all panelboards to identify the area and/or equipment controlled by the panelboard, the power source, and the voltage system. Legend plates shall be weatherproof and abrasion resistant phenolic material. Lettering shall be black on white background. Panelboards shall be thoroughly inspected for physical damage, proper alignment, anchorage, and grounding. The exterior finish shall be inspected for blemishes, nicks, and bare spots, and touched up as required using matching touch-up paint. Inspections shall be made for proper installation and tightness of connections for circuit breakers.

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Panelboards shall be thoroughly tested after installation and connection to respective loads. Contractor shall measure and record voltage at the panelboard and amperage to the panelboard, with the respective equipment operating. Test results shall be provided to the Resident Engineer.

109400-3.5 SURGE ARRESTER INSTALLATION. Install Surge Protector Devices (SPD)/Transient Voltage Surge Suppressor (TVSS) devices in conformance with of FAA-STD-019d, dated August 9, 2002, "LIGHTNING AND SURGE PROTECTION, GROUNDING, BONDING AND SHIELDING REQUIREMENTS FOR FACILITIES AND ELECTRONIC EQUIPMENT" and the respective manufacturer's directions and recommendations. Contractor shall confirm all connections to the surge arrester (phases, neutral, and ground) are completed and secure. Connection leads to the surge arrester shall be sized per the respective manufacturer's recommendation, and as detailed herein and shall be maintained as short as possible, maximum two feet in length, and laced together for mutual coupling. The conduit or conduit nipple connecting the SPD/TVSS device enclosure to the panel enclosure shall be sealed with duct seal or other nonflammable medium to prevent soot from entering the enclosure in the event of a SPD/TVSS device failure.

109400-3.6 CABLE INSTALLATION. Installation of cables shall conform to Item 108, per the respective equipment manufacturer's recommendations, and as detailed on the Plans.

109400-3.7 CONDUIT INSTALLATION. Installation of conduit shall conform to Item 110, as detailed on the Plans and as specified herein.

Conduit size and fill requirements shall comply with Appendix C, conduit fill tables, of the NEC. It should be noted these are minimum requirements and larger conduit sizes or smaller fill requirements shall be used whenever specified or detailed on the drawings.

Ream conduits only after threads are cut. Cut joints square to butt solidly into couplings. Where necessary to join two pieces of conduit, and it is impossible to use standard couplings, use 3-piece malleable iron conduit coupling. The use of running thread is prohibited. This applies to all rigid conduit installations, underground or otherwise.

Make all joints in steel underground conduit watertight with approved joint compound. Temporarily plug conduit openings to exclude water, concrete, or any foreign materials during construction. Clean conduit runs before pulling in conductors.

Where conduit enters a box or fitting, provide a steel locknut and an insulated metallic bushing. Use this method to terminate conduit in panels, pull boxes, safety switches, etc.

Provide NEMA four hubs for all conduit entries into enclosures rated NEMA 4, 4X to maintain NEMA 4, 4X rating.

Do not run conduit below or adjacent to water piping.

Provide UL listed liquid tight flexible metal conduit at final connections to devices where subject to vibration or to accommodate transition from a device to a rigid conduit system. UL listed liquid tight flexible metal conduit shall be listed suitable for grounding and shall be sunlight resistant.

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109400-3.8 WIRE IDENTIFICATION. The Contractor shall furnish and install self-sticking wire labels on all power and control wires at the point where they connect to the control equipment or to the terminal blocks. Wire labels shall be of the self-sticking preprinted type and of the manufacturer's recommended size for the wire involved. Identification markings shall be as shown in the Plans or as directed by the Resident Engineer. Color code phase and neutral conductor insulation for No. 6 AWG or smaller. Provide colored marking tape for phase and neutral conductors for No. 4 AWG and larger. Insulated ground conductors shall have green colored insulation for all conductor AWG and/or KCMIL. Standard colors for power wiring and branch circuits shall be as follows:

208/120 VAC, 3 Phase, 4-Wire

Phase A	Black
Phase B	Red
Phase C	Blue
Neutral	White
Ground	Green

109400-3.9 MARKING AND LABELING. Legend plates shall be provided for all equipment. Legend plates shall be provided to identify the equipment controlled, the power source, and the function of each device. Legend plates shall be weatherproof and abrasion resistant phenolic/plastic engraved material and fastened with contact type permanent adhesive, screws, or rivets. Installation shall not break, crack, or deform the legend plate. Lettering shall be 1/4 in. high, black on a white background, unless noted otherwise. Each individual circuit breaker, safety switch, control panel, panelboard, etc. shall be furnished with a weatherproof phenolic engraved legend plate that identifies the respective device, the power source, and the respective voltage, phase, and wire. Furnish additional phenolic engraved legend plates as detailed on the Plans and/or where required by code.

Furnish and install weatherproof warning label for each meter socket, enclosed circuit breaker, disconnect switch, switchboard, panelboard, load center, motor control center, and control panel to warn persons of potential electric arc flash hazards, per the requirements of NEC 110.16 "Flash Protection". Labels shall also conform to ANSI Z535.4-2002 "American National Standard for Product Safety Signs and Labels". NEC 110.16 requires that switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers that are likely to require examination, adjustment, servicing or maintenance while energized, shall be field marked to warn qualified persons of potential arc flash hazards. The markings shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment. This new requirement is intended to help reduce the occurrence of serious injury or death due to arcing faults to those working on or near energized electrical equipment. The warning labels are to indicate to a qualified worker who intends to open the equipment for analysis of work that a serious hazard exists and that the worker should follow appropriate work practices and wear appropriate personal protective equipment (PPE) for the specific hazard. Labels shall be as detailed on the Plans or shall include at least the following information: Warning - Potential Arc-Flash Hazards exist while working on this energized equipment. Appropriate PPE Required.

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109400-3.10 GROUNDING REQUIREMENTS. Grounding shall conform to the following as applicable: The Contractor shall furnish and install all grounding shown on the Plans and/or as may be necessary or required to make a complete grounding system as required by the latest National Electrical Code (NFPA 70) in force. The reliability of the grounding system is dependent on careful, proper installation and choice of materials. Improper preparation of surfaces to be joined to make an electrical path, loose joints or corrosion can introduce impedance that will seriously impair the ability of the ground path to protect personnel and equipment and to absorb transients that can cause noise in communications circuits. The following functions are particularly important to ensure a reliable ground system:

- (a) All products associated with the grounding system shall be UL-listed and labeled.
- (b) All bolted or mechanical connections shall be coated with a corrosion preventative compound before joining, Dearborn Chemical Company "No-Oxide A" compound or equal.
- (c) Metallic surfaces to be joined shall be prepared by the removal of all non-conductive material, per 2002 National Electrical Code Article 250-12. All copper bus bars must be cleaned prior to making connections to remove surface oxidation.
- (d) Raceway fittings shall be made up tight to provide a permanent low impedance path for all circuits.
- (e) Furnish and install ground rings, ground fields, and/or ground rods at all locations where shown on the Plans or specified herein. Ground rods shall be $\frac{3}{4}$ inch diameter, 10 ft long, UL-listed, copper clad with 10-mil minimum copper coating. Top of ground rods shall be a minimum of 30 inches below finish grade unless otherwise noted on the Plans. Ground rods shall be spaced as detailed on the Plans and in no case spaced less than one-rod length apart. All connections to ground rods and/or ground rings shall be made with one shot, exothermic weld type connectors, Cadweld by Erico Products, Inc., Solon, Ohio, (Phone 1-800-248-9353), Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (Phone 918-663-1440) or equal. Exothermic weld connections shall be installed in conformance with the respective manufacturer's directions using molds as required for each respective application. Bolted connections will not be permitted at ground rods or at buried grounding electrode conductors. In addition to the grounding work described herein and shown on the Plans, the Contractor shall test the made electrode ground field/ground ring with an instrument specifically designed for testing ground field systems. If ground resistance exceeds **10 Ohms**, contact Resident Engineer for further direction. Copies of ground field test results shall be furnished to the Resident Engineer for review and record purposes.
- (f) All connections, located above grade, between the different types of grounding conductors shall be made using UL-listed double compression crimp type connectors or UL-listed bolted ground connectors. For ground connections to enclosures, cases and frames of electrical equipment not supplied with ground lugs the Contractor shall drill required holes for mounting a bolted ground connector. All bolted ground connectors shall be Burndy, Thomas and Betts, or equal. Tighten connections to comply with tightening torques in UL Standard 486A to assure permanent and effective grounding.

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- (g) All metal equipment enclosures, conduits, cabinets, boxes, receptacles, etc. shall be bonded to the respective grounding system. Provide grounding bushings at all conduits entering service entrance equipment (meter bases, service disconnects, service panelboards, etc.) and distribution panels or load centers and ground wire from bushing to ground bus in the respective service entrance equipment or distribution panel.
- (h) Each feeder circuit and/or branch circuit shall include an equipment ground wire. Metal raceway or conduit shall not meet this requirement. The equipment ground wire from equipment shall not be smaller than allowed by 2002 NEC Table 250-122 "Minimum Size Conductors or Grounding Raceway and Equipment." When conductors are adjusted in size to compensate for voltage drop, equipment-grounding conductors shall be adjusted proportionately according to circular mil area. All equipment ground wires shall be copper either bare or insulated green in color. Where the equipment grounding conductors are insulated, they shall be identified by the color green and shall be the same insulation type as the phase conductors.
- (i) All utility transformer bank grounds shall be installed in accordance with the serving utility company's recommendation and in accordance with NEC.
- (j) Bond the main electrical service neutral to ground at the main service disconnect. Bond the service neutral to ground at one location only per the National Electrical Code. A grounding connection shall not be made to any neutral circuit conductor on the load side of the service disconnecting means, except as permitted by 2005 NEC 250-24.
- (k) The secondary neutral of all transformers (separately derived system transformers) shall be grounded in accordance with National Electrical Code. The respective grounding electrode conductor shall be connected to the neutral point of the transformer between the transformer and the output disconnecting means. Size of the grounding electrode conductor shall be in accordance with 2002 NEC Article 250-66 and Table 250-66 unless shown larger on the drawings. A bond shall be provided between the neutral and transformer case, or other metal that is part of the AC equipment grounding system, so as to complete a circuit for fault current to the transformer winding from the AC equipment grounding system. Size of the neutral bonding conductor shall be in accordance with 2002 NEC Article 250-102.
- (l) All exterior metal conduits, where not electrically continuous because of manholes, handholes, non-metallic junction boxes, etc., shall be bonded to all other metal conduit in the respective duct run, and at each end, with a copper bonding jumper sized in conformance with 2002 NEC 250-102. Where metal conduits terminate in an enclosure (such as a motor control center, switchboard, etc) where there is not electrical continuity with the conduit and the respective enclosure, provide a bonding jumper from the respective enclosure ground bus to the conduit sized per 2002 NEC 250-102.
- (m) Install grounding electrode conductors and/or individual ground conductors in Schedule 40 or Schedule 80 PVC conduit. Where grounding electrode conductors or individual ground conductors are run in PVC conduit, Do Not completely encircle conduit with ferrous and/or magnetic materials. Use non-metallic reinforced fiberglass strut support. Where metal conduit clamps are installed, use nylon bolts, nuts, washers and spacers to interrupt a complete metallic path from encircling the conduit.

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109400-3.11 TESTING. The Contractor shall make at his own expense any tests of equipment, wiring, or insulation deemed necessary by any inspection department or by the Contractor Officer and shall provide all apparatus, meters, materials, and labor required to make such tests.

The Contractor shall test and demonstrate to the satisfaction of the Engineer the following:

- (a) That all lighting, power, and control circuits are continuous and free from short circuits.
- (b) That all circuits are free from unspecified grounds.
- (c) That the insulation resistance to ground of all ungrounded conductors of multiple circuits is not less than 50 megohms.
- (d) That all circuits are properly connected in accordance with applicable wiring diagrams.
- (e) That all circuits are operable. Tests shall be conducted that include operating each control not less than ten (10) times and the continuous operation of each lighting and power circuit for not less than one-half an hour.
- (f) Test all transformers, measure and record primary and secondary voltages when operating under load.
- (g) All tests shall be recorded, stating the wire circuit reading, date, and field conditions. Submit test results to Resident Engineer.

METHOD OF MEASUREMENT

109400-4.1 The quantity of this item to be furnished and installed shall be measured for payment as a unit price per lump sum and shall include all materials, equipment, support hardware, excavation, concrete work, service cables in conduit, surge protection, grounding, electric service work, labor, tools, connections, utility coordination, preparation, assembly, testing and other incidentals as required to perform the specified work and testing the installation for satisfactory operation, as approved by the Resident Engineer.

The 208/120 VAC feeder cables in duct from the service breaker to the secondary power distribution and control panel shall be paid for separately under Item AR800990, Power Cables in Duct.

BASIS OF PAYMENT

109400-5.1 Payment shall be made at the Contract unit price per lump sum. This price and payment shall be full compensation for furnishing and installing all materials, equipment, support hardware, concrete, work, excavation, electric service work, service cables in conduit, surge protection, grounding, labor, tools, connections, utility coordination, preparation, assembly, and incidentals necessary to complete this item of work. Cable in duct from the service breaker to the secondary power distribution and control panel shall be paid for under Item AR800990, Power Cables in Duct.

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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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

Payment will be made under:

Item AR109400 Power Distribution System - per lump sum.

ITEM 110

INSTALLATION OF AIRPORT UNDERGROUND ELECTRICAL DUCT

Revise Item 110 of the Standard Specifications and Supplemental Specifications as follows:

110-1.1 DESCRIPTION. Add the following:

"This item shall consist of the construction of 2-way, 4-way and 6-way concrete encased duct, steel duct, direct bury, and electrical handholes at the locations shown on the Plans. Excavation and backfilling for the encased duct or excavation and backfill for the electrical handhole shall not be paid for separately but shall be included in the unit cost of the duct or handhole."

EQUIPMENT AND MATERIALS

110-2.5 STEEL CONDUIT. Add the following:

"Rigid Steel Conduit and fittings shall be hot-dipped galvanized, UL listed, produced in accordance with UL Safety Standard No. 6 and ANSI C80.1. Installation shall be by trench and backfill or boring or jacking, and/or installation through sleeves or tunnels. Conduits shall be sized as detailed on the Plans.

"Explosion-Proof Conduit Seal-Off Fittings. Explosion-proof conduit seals shall be listed suitable for use in Class I, Division 1, Group D hazardous location. Explosion-proof conduit seals shall be Crouse-Hinds EYS or EZS Series, Appleton EYS, ESU, or EY Series, O-Z/Gedney EYA, EY, EZS Series explosion-proof sealing fitting, or approved equal.

"Miscellaneous Fittings. Fittings shall be suitable for use with conduits and ducts supplied. All fittings for use with rigid metal conduit shall be threaded. Set screw type fittings are not acceptable. All conduit bodies, fittings, and boxes installed in classified hazardous locations (Class I, Division 1 or 2, Group D) shall be suitable for use in Class I, Division 1, Group D locations. Fittings shall be as manufactured by Appleton, Crouse-Hinds, Hubbel-Killark, O-Z/Gedney, or approved equal."

110-2.7 PLASTIC CONDUIT. Add the following:

"Conduits for concrete encasement shall be 4-inch diameter, PVC, Schedule 40, UL listed, rated for 90° C cable, conforming to NEMA Standard TC-2 and UL 651, listed suitable for concrete encasement."

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Add:

110-2.8 ELECTRICAL HANDHOLE. The electrical handhole shall be of pre-cast construction, made in accordance with the Plan and details. Materials shall meet IDOT specifications and shall be manufactured by IDOT approved sources. The frame and cover, bottom grate, sump tile, stone and sand bedding and all incidentals used in furnishing a complete manhole shall be as detailed and as specified in the Plans and Contract documents. Frame covers shall include cast lettering with the wording "**Electric**". Information on a pre-cast structure is available from Utility Concrete Products, LLC, 1801 North Van Dyke Road, Plainfield, Illinois 60544, telephone: 815.436.7880, facsimile: 815.436.8068.

CONSTRUCTION METHODS

110-3.1 GENERAL. Add the following:

"All conduit installed in Class I, Division 1 or 2, Group D locations shall be suitable for installation in the respective hazardous areas. Install explosion-proof conduit seal off fittings in conformance with the manufacturer's instructions. Per Article 501.15 (C) (6) of the 2005 NEC and UL Standard 886, the cross sectional area for conductors installed in a conduit seal off fitting shall not exceed 25 percent, unless the conduit seal off fitting has been specifically approved for a higher percentage of fill."

110-3.4 DUCT MARKERS. Delete this Section and replace with the following:

"110-3.4 DUCT MARKERS. The location of all ducts shall be marked by installing a concrete duct marker (2 foot by 2 foot), at each end of each duct and at bends, as shown in the Plans. Also, each bituminous pavement edge shall be marked with a brass marker installed in the finished pavement, as shown in the Plans. Ducts under concrete pavement shall be marked with a "D" impressed into the fresh pavement, as shown on the Plans. The cost of furnishing and installing the markers shall be included in the unit price of the duct."

110-3.5 BACKFILLING. Add the following to the first paragraph:

"Duct located under paved areas shall be backfilled with the FA-6 material."

Add:

110-3.8 ELECTRICAL HANDHOLE. The electrical handhole shall be installed to the finished grade and as shown in the Plans.

METHOD OF MEASUREMENT

110-4.1 METHOD OF MEASUREMENT. Delete this Section and replace with the following:

"110-4.10 METHOD OF MEASUREMENT. The quantity of duct to be paid for under this item shall be the number of linear feet of the type and size of steel duct or duct bank installed, measured in place, completed and accepted. Separate measurements for individual ducts in a multi-duct bank will not be made.

"The quantity of Electrical Handhole to be paid under this item shall be the number of units installed measured in place, completed and accepted.

"No separate measurement shall be made for furnishing and installing duct markers as they are incidental to a completed and accepted duct installation.

"Excavation, backfilling, topsoiling, seeding and mulching, or sodding for the trenching and backfilling of the duct installation and handhole installation shall not be paid for separately but shall be included in the unit cost of the duct or handhole."

BASIS OF PAYMENT

110-5.1 BASIS OF PAYMENT. Delete this Section and replace with the following:

"110-5.1 BASIS OF PAYMENT. Payment will be made at the Contract unit price for each type and size of duct and duct bank completed and accepted. Payment will be made at the Contract unit price for electrical handhole completed and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, for disposal of removed concrete duct, for preparation of all duct ends to remain, and for all labor, equipment, tools, and incidentals necessary to complete this item.

"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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

"Payment will be made under:

"Item ARI 10212	2" Steel Duct, Direct Bury - per linear foot.
Item ARI 10502	2-Way Concrete Encased Duct - per linear foot.
Item ARI 10504	4-Way Concrete Encased Duct - per linear foot.
Item ARI 10506	6-Way Concrete Encased Duct - per linear foot.
Item ARI 10610	Electrical Handhole - per each.

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ITEM 150510

ENGINEER'S FIELD OFFICE

150510-1.1 This item shall consist of furnishing and maintaining in good condition, for the exclusive use of the Resident Engineer, a weatherproof building described hereinafter at the location approved by the Resident Engineer. Unless otherwise approved, the building shall be independent of any buildings used by the Contractor and all keys to the building shall be turned over to the Resident Engineer. The Resident Engineer will designate the location of the building and it shall remain on the work site until released by him. (Mobile units may be substituted with the approval of the Resident Engineer.)

DESCRIPTION

150510-2.1 Engineer's Field Office, Type A - Type "A" field offices shall have a ceiling height of not less than seven (7) feet and a floor space of not less than three hundred and eighty (380) square feet. The office shall be provided with sufficient heat, natural and artificial light and air conditioning. Doors and windows shall be equipped with locks approved by the Resident Engineer. Suitable sanitary facilities meeting Federal, State, and local health department requirements shall be provided and maintained clean and in good working condition and shall be stocked with lavatory and sanitary supplies at all times during the period of the Contract. Should sanitary facilities that are an integral part of the office not be practicable, temporary toilet facilities shall be provided. The temporary facilities must be of a size to **permit use by access-challenged** persons. A **separate** facility for hand washing must also be available and maintained.

In addition, the following equipment and furniture meeting the approval of the Resident Engineer shall be furnished:

- (a) One (1) desk (minimum 42" by 30") with three (3) non-folding chairs with upholstered seats and backs.
- (b) One (1) desk (minimum 42" by 30") with height adjustment (23" to 30") for computer use.
- (c) One (1) four-post drafting table (minimum 37½" by 48") and one (1) adjustable stool.
- (d) One (1) free standing file cabinet, legal size, four-drawer.
- (e) Four (4) folding chairs.
- (f) One (1) carbon dioxide fire extinguisher (ten pound rated capacity).
- (g) One (1) steel equipment cabinet (minimum 44" high by 24" wide by 30" deep) with lock, bolted to the office floor.
- (h) One (1) electric water cooler dispenser and supply of water bottles.
- (i) One (1) 2.5 cubic foot counter-top office refrigerator.
- (j) One (1) 800 watt, 0.8 cubic foot microwave oven.
- (k) One (1) electric tape printing calculator.
- (l) One (1) telephone and **three (3)** telephone lines (one (1) telephone line to have facsimile transmission capability).
- (m) One (1) automatic telephone answering machine.
- (n) One (1) plain paper memory laser facsimile machine (including maintenance and operating supplies).

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- (o) One (1) photocopy machine (including maintenance and operating supplies) capable of collating, enlarging and reducing, and copying onto 8.5" by 11" and 11" by 17" size paper.
- (p) Two (2) 28-quart wastebaskets with 8-gallon trash bags.

BASIS OF PAYMENT

150510-3.1 The building fully equipped as specified herein will be paid for at the Contract unit price per lump sum for Engineer's Field Office. This price shall include all utility costs and shall reflect the salvage value of the building, equipment, and furniture which become the property of the Contractor after release by the Resident Engineer. All telephone calls within Area Code 815 and to Area Codes 217, 312, 630, 708, 773, and 847 shall be included in the cost of the Engineer's Field Office. The Resident Engineer shall reimburse the Contractor for all long distance calls outside of these area codes.

Payment will be made under:

Item AR150510 Engineer's Field Office - per lump sum.

ITEM 152

EXCAVATION AND EMBANKMENT

Revise Item 152 of the Standard Specifications and Supplemental Specifications as follows:

152-1.1 DESCRIPTION. Add the following:

"For the purposes of Excavation and Embankment in this Project, this item is to be constructed for aircraft weighing less than 60,000 pounds (Standard Proctor standard)."

152-1.2 CLASSIFICATION. Add the following:

"Topsoil stripping and undercutting as required in the Plans may result in an excess of topsoil and unstable materials that cannot be used as shoulder embankment or placed as topsoil to the new grade shown in the Plans. All such excess material shall be hauled to the on-site location shown in the Plans and spread to the lines and grades noted in the Plans. The disposal site shall be left with neat lines and grades and sloped to drain. All excess or unstable material shall be used elsewhere in the Work to the extent possible as permitted in the Contract specifications, before the material is hauled away from the Work and disposed of on-site. Only material identified by the Resident Engineer for haul and disposal shall be hauled from the Work and disposed of at the on-site location shown in the Plans. Loading, haul and spreading of the excess material to the on-site disposal site shall be paid under Item AR800994. Initial cut (stripping or undercutting) of the material shall be paid as "Unclassified Excavation".

Add the following:

"The geotechnical investigation identifies areas of existing subgrade requiring soil stabilization, as shown on the Plans. This stabilization is to be provided by the Contractor in one of two ways, as directed by the Resident Engineer:

- ❖ Undercut of unstable material to the depth indicated on the Plans (**Undercut Detail No. 1**), or as directed by the Resident Engineer, and placement of a separation fabric over the weak soil area, then placement of four-inch layer of CA-3 Aggregate Backfill, then placement of a soil stabilization material (structural geogrid), before placement of CA-6 Aggregate Backfill material to the thickness shown on the Plans and **Undercut Detail No. 1**. Undercut shall be paid as "Unclassified Excavation", with the unstable material hauled and disposed of on-site at the locations shown in the Plans, or in shoulder areas approved by the Resident Engineer. Embankment using on-site material will be performed first, if material is available on-site, and shall be paid as "Unclassified Excavation". Off-site borrow embankment, as required, shall be paid under Item AR152442. Haul of material disposed of at the disposal location away from the Work will be paid under Item AR800994. Separation fabric meeting the requirements of Item 156513 shall be paid under Item AR156513. CA-3 Aggregate Backfill meeting the requirements of Item 800925 shall be paid separately under Item AR800925. Geogrid soil stabilization material meeting the requirements of Item 152540 shall be paid separately under Item AR152540. CA-6 Aggregate Backfill meeting the requirements of Item 800926 shall be paid separately under Item AR800926.

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- ❖ Undercut of unstable material to the depth indicated on the Plans (**Undercut Detail No. 2**), or as directed by the Resident Engineer, and placement of suitable on-site clayey embankment material or off-site borrow material. Undercut shall be paid as "Unclassified Excavation", with the unstable material hauled and disposed of on-site at the locations shown in the Plans, or in shoulder areas approved by the Resident Engineer. Embankment using on-site material will be performed first, if material is available on-site, and shall be paid as "Unclassified Excavation". Off-site borrow embankment, as required, shall be paid under Item AR152442. Haul of material disposed of at the disposal location away from the Work will be paid under Item AR800994."

CONSTRUCTION METHODS

152-2.1 GENERAL. Add the following:

"The Contractor will proofroll the subgrade when required by the Resident Engineer, as described in the Plans and as directed by the Resident Engineer. The cost for this proofing will not be paid for separately but shall be included in the cost for Unclassified Excavation."

152-2.2 EXCAVATION. Add the following to the fourth paragraph:

"All material unsatisfactory for use as embankment under paved areas, including broken asphalt and concrete from existing pavement surfaces excavated under "Unclassified Excavation", shall be removed by the Contractor to an off-site disposal site. Haul and disposal of these unsuitable materials shall not be measured separately, but their haul and disposal shall be incidental to Unclassified Excavation."

"The Contractor will not be allowed to haul any materials across existing pavements or areas designated by the Airport Owner as used for agriculture or which have been seeded under this or previous contracts.

"Payment for haul away and disposal of unsuitable Unclassified Excavation shall not be made but shall be incidental to Unclassified Excavation."

152-2.12 TOPSOIL. Add the following:

"Should the Resident Engineer identify excess topsoil or unstable material from topsoil stripping and undercut operations that is to be disposed of away from the Work at the on-site location identified in the Plans, the cost of loading, hauling and spreading the excess material will be paid under Item Ar800994. Spreading of the excess material at the disposal site shall not be measured separately for payment but shall be included in the cost for Unclassified Disposal Haul On-Site.

Add:

152-2.15 DUST CONTROL WATERING. This Work shall consist exclusively of the control of dust from construction operations and not for use in the compaction of earth embankment.

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Dust shall be controlled by the regular, uniform application of sprinkled water to earth surfaces 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 this item.

METHOD OF MEASUREMENT

Add:

152-3.6 Load, haul and spread of excess topsoil and unstable material identified by the Resident Engineer for disposal at the on-site location shown on the Plans away from the Work, shall be measured for payment in place at the disposal site. Should the Contractor and the Resident Engineer have agreed in writing by the use of Form AER-98 I that the Plan quantities are accurate, no further measurement will be required and payment will be made to the quantity shown in the Contract for Unclassified Disposal Haul On-Site, except that if errors are discovered after work has been started, appropriate adjustments will be made.

152-3.7 Dust control watering will not be measured for payment, but shall be considered incidental to the Contract items for earthwork.

BASIS OF PAYMENT

Add:

Payment will be made under:

Item AR152410	Unclassified Excavation - per cubic yard.
Item AR152442	Offsite Borrow Excavation - per cubic yard.
Item AR800994	Unclassified Disposal Haul On-Site - per cubic yard.

ITEM 152540

SOIL STABILIZATION FABRIC

DESCRIPTION

152540-1.1 This item shall consist of providing and installing fabric material or geogrid structure as soil stabilization fabric (**for Undercut Detail No. 1**).

MATERIALS

152540-2.1 GEOGRID MATERIAL FOR SOIL STABILIZATION. Material for Soil Stabilization Fabric shall be an integrally formed grid structure manufactured of a stress resistant polypropylene material providing a load transfer mechanism by positive mechanical interlock. The material shall be inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids. The material shall be Structural Geogrid BX1100, by Tensar, or equal. Alternate fabrics may be submitted for consideration by the Resident Engineer.

CONSTRUCTION REQUIREMENTS

152540-3.1 GEOGRID MATERIAL FOR SOIL STABILIZATION. The geogrid shall be installed over weak subgrade as identified by proofrolling performed by the Contractor or as directed by the Resident Engineer. Proofrolling shall be provided under Item 152. The material shall be installed in accordance with the manufacturer's recommendations at the locations indicated by the Resident Engineer.

METHOD OF MEASUREMENT

152540-4.1 The quantity of Soil Stabilization Fabric shall be the measured area in square yards of structural geogrid placed and accepted. Overlap as recommended by the manufacturer shall not be measured separately but shall be included in the Contract unit price for Soil Stabilization Fabric (Structural Geogrid).

BASIS OF PAYMENT

152540-5.1 Payment shall be made at the Contract unit price per square yard for Soil Stabilization Fabric (Structural Geogrid) placed and accepted. This price shall be full compensation for furnishing all materials and for all transportation, preparation, installation and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item ARI52540 Soil Stabilization Fabric - per square yard.

ITEM I 56000

EROSION CONTROL

Revise the Recurring Special Provision for Item I 56000, Erosion Control as follows.

I 56000-2.1 SILT FENCE. Delete the first paragraph of this Section and replace with the following:

“This fence shall be of either a prefabricated type or shall be constructed in the field, and regardless of the fabrication method, shall be of materials meeting the dimensions and material requirements shown in the Plans.”

BASIS OF PAYMENT

Add:

Payment will be made under:

Item ARI 565 10 Silt Fence - per linear foot.

ITEM 156513

SEPARATION FABRIC

This item shall be provided in accordance with the Recurring Special Provision for Item 156513, Separation Fabric.

Payment will be made under:

Item AR156513 Separation Fabric - per square yard.

ITEM 162

CHAIN-LINK FENCES

(Class E)

Revise Item 162 of the Standard Specifications as follows:

162-1.1 DESCRIPTION. Revise the first paragraph to read as follows:

"This item of work shall consist of furnishing and installing new Class E (chain link) fence and gates of the height and configuration at the locations shown and as detailed in shown in the Plans, and in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, IDOT Standard 664001-01, and these Special Provisions. The Class "E" fence and gates shall be the height and configuration as shown in the Plans.

"This item shall also include the removal of existing 6-foot chain-link fence, with barbed wire, at the locations shown on the Plans. The removed fence is to be placed at an on-Airport site identified by the Resident Engineer."

162-2.1 FABRIC. Add the following to the list of fabric types:

"Zinc - 5% aluminum-mischmetal alloy-coated steel."

Rewrite paragraph (a) (1) as follows: Change "AASHTO M181, Type I, Class B" to "AASHTO M181, Type I, Class D"

Rewrite paragraph (a) (2) as follows: Change "AASHTO M181" to "AASHTO M181, Type II"

Rewrite paragraph (a) (3) as follows: Change "AASHTO M181" to "AASHTO M181, Type III"

Rewrite paragraph (a) (4) as follows: Change "AASHTO M181, Type IV bonded" to "AASHTO M181, Type IV, Class B"

Add the following as paragraph (a) (5):

"(5) Zinc - 5% aluminum-mischmetal alloy-coated steel shall conform to the requirements of ASTM F1345, Class 2."

Add the following:

"The proposed chain link fence fabric shall be vinyl clad with vinyl clad fittings and ties and coated steel, as shown on the Plans and conforming to AASHTO M181 Type IV, Class B. Bonding shall be by the thermal fusion method. Color shall be green."

162-2.2 BARBED WIRE. Add the following:

“Three strands of barbed wire shall be used above the top rail on attached to the fence or gate, as shown in the Plans. Barbed wire shall have 4-point barbs spaced a maximum of 5-inches apart. The barbs shall be sharp and tightly wrapped about a uniformly twisted 12-½ (0.0985 inch) gauge line wires, galvanized or aluminized.”

162-2.3 FENCE POSTS, POST TOPS AND EXTENSIONS, RAILS, GATES BRACES, STRETCHER BARS, AND CLIPS. Add the following:

“Top rail will be required, as specified below.”

Rewrite paragraph (a) (1) as follows: Change “ASTM A120” to “ASTM F1083”

Rewrite paragraph (a) (2) as follows: Change “ASTM A120” to “ASTM F1083”

Rewrite paragraph (a) (2) (1) as follows: Change “ASTM A120” to “ASTM F1083”

Rewrite paragraph (a) (3) as follows: Change “ASTM A120” to “ASTM F1083”

Add the following as paragraph (a) (6):

“(6) Steel pipe with Zinc - 5% aluminum-mischmetal alloy-coating conforming to ASTM F1234 Group IC, Type C.”

Add the following:

“Items required, as shown in the Plans, shall be vinyl coated, bonding by thermal fusion method. Color shall be green.

“Gate Posts. The posts shall be Type A or B. Posts for 20-foot wide gate shall have a nominal O.D. of 3.50 inches and weigh at least 7.58 pounds per foot for Type A and 5.707 pounds per foot for Type B.

“Line Posts. The posts shall be Type A or B. The posts shall have a nominal O.D. of 1.90 inches and weigh at least 2.72 pounds per foot for Type A and 2.28 pounds per foot for Type B.

“Terminal Posts (End, Corner or Pull). Terminal posts shall be Type A or B. Terminal posts shall be 2-¾ inch O.D. weighing at least 3.65 pounds by foot for Type A or 3.11 pounds per foot for Type B.

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“Top Rail. The fence shall have a continuous top rail for its full length consisting of 1-5/8 inch O.D. pipe, Type A or B, having a minimum weight of 2.27 pounds per foot for Type A or 1.83 pounds per foot for Type B, with minimum bending strength of 202 pounds at the center of a ten-foot span. The top rail shall be fitted with couplings or swedged for connecting the lengths into continuous runs. The couplings shall not be less than 6-inches long, and shall allow for expansion and contraction of the rail.

“Post Braces. Post braces shall be provided for each corner, pull and end post and shall meet the requirements for top rails.

“Post Tops. Post tops shall consist of ornamental tops provided with a hole suitable for through-passage of the top rail. The post tops shall fit over the outside of the posts and exclude moisture from inside the posts.”

Add the following to paragraph (c):

“Vehicle gates shall be two swing gates placed side by side to span the required opening as shown on the Plans. Gate frames shall be constructed of a nominal O.D. of 1.90 inches and weigh at least 2.72 pounds per foot for Type A and 2.28 pounds per foot for Type B. The gate frame shall be welded at all corners to form a rigid panel, and filled with fabric matching that specified for fence, and topped with three-strand barbed wire as specified herein. The hinges shall allow the gate to swing 180°. The latches shall be heavy duty and have provision for a pad lock. Matching gatekeepers and center gate stops shall be furnished as shown in the Plans. Gate components shall be vinyl coated, bonding by thermal fusion method. Color shall be green.

“Each gate, other than electric gates, shall be furnished with one padlock, Model Number 21B-1 1/2 inch bronze shackle, by Best Access Systems, with core keyed to the Owner’s masterkey system.”

162-2.4 WIRE TIES AND TENSION WIRE. Change “AASHTO M181” to “AASHTO M181, Type I, Class 2 or Type II”

Add the following:

“Coiled spring tension wire of at least 7 gage O.D. vinyl clad steel wire shall be stretched along the bottom of the fence and securely fastened to the fabric with hog rings at 2-foot intervals. The top tension wire is deleted in lieu of the top rail. Wire and hog rings shall be vinyl clad; color green.”

162-2.7 CONCRETE. Add the following:

“A high-early strength concrete may be used. The concrete mix design shall be approved by the Illinois Division of Aeronautics prior to its use on this Project.”

Add:

162-2.8 SIGNS. The Contractor shall provide and install “Restricted Area” signs as shown on the Plans.

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Add:

162-2.9 CERTIFICATION AND SHOP DRAWINGS. The Contractor shall submit shop drawings detailing all fence items to be furnished to the Project Engineer for approval. The Contractor shall provide a written certification that all fence materials used in the Work meet the Contract Documents.

CONSTRUCTION METHODS

162-3.1 GENERAL. Add the following:

“New fence shall meet all of the applicable installation requirements of IDOT Standard 664001-01, Chain Link Fence, as revised in the Plans and these Special Provisions, or as directed by the Resident Engineer.”

162-3.2 CLEARING FENCE LINE. Add the following:

“All new fence shall be placed along a level, smooth, finished grade. The Contractor shall correct any irregularities in the ground’s surface prior to installation of the fence. This clearing/grading shall be incidental to the Contract unit price for fence or gates.”

162-3.3 INSTALLING POST. Add the following to the Standard Specifications and to IDOT Specifications Article 664.04:

“All posts shall be set to a minimum depth of 42 inches below the finished ground line. The fence shall not be erected until the concrete encasement around the post has cured seven days or reached a compressive strength of 2,500 psi. If a high-early strength concrete is used, the fence may be erected once the concrete has reached a compressive strength of 2,500 psi. The contractor shall be responsible for concrete testing other than at 14 and days.”

162-3.8 EXISTING FENCE CONNECTIONS. Add the following:

“The furnishing and installation of new terminal posts and brace spans and any other incidental modifications needed to provide an acceptable connection to existing fence shall not be paid separately but shall be included in the Contract unit price for new fence.”

Add:

162-3.10 GROUNDING. The fencing shall be grounded in the manner and at the locations shown in the Plans. Grounding of the fence will not be measured separately for payment but shall be included in the Contract unit price for fencing.

Add:

162-3.11 FENCE REMOVAL. Existing fence to be removed shall be carefully removed at the locations shown on the Plans and as directed by the Resident Engineer. Holes shall be refilled as elsewhere specified in Paragraph 162-3.2. Concrete shall be carefully removed from the base of all in-ground posts. Concrete shall be disposed of off-site, with such disposal incidental to fencing.

All fence components, including fence fabric, posts, tops, rails, frames, braces, stretcher bars, barbed wire and other items comprising the existing fence, shall be stored by the Contractor at an on-site location identified by the Resident Engineer.

162-4.1 METHOD OF MEASUREMENT. Add the following:

“Removal and storage on-site of existing fence shall be measured from outside to outside of the length of fence removed and accepted.”

162-5.1 BASIS OF PAYMENT. Add the following:

“Payment will be made at the Contract unit price per linear foot for existing fence removed and stored. This price shall be full compensation for the Contractor’s removal and transporting and on-site storage of fence as specified, and for all labor, equipment, tools, and incidentals necessary to complete the item.

“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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.”

Delete the last paragraph and replace with the following:

“Payment will be made under:

Item ASI 62320	Class E Gate 20' - Vinyl - per each.
Item ASI 62406	Class E Fence, Vinyl - 6' - per linear foot.
Item ARI 62900	Remove Class E Fence - per linear foot.
Item AS800995	Class E Gate 5' - Vinyl - per each.”

ITEM 162700

ELECTRIC SLIDING GATE

162700-1.1 DESCRIPTION. This item shall consist of furnishing and installing electric slide gates (6' in height, plus barbed wire) in accordance with these Specifications and at the location shown on the Plans. This item will include all labor, equipment, and materials required to put the proposed electric slide gate in proper working order. The Contractor shall be responsible to ensure that each slide gate, electric gate operator, access control station, and all associated power and control components are compatible with each other to provide a complete and properly operating system suitable for the respective application. This item shall also include furnishing and installing all surge arresters/protectors, disconnects, conduits, ducts, wire, and all other electrical equipment as detailed the Plans and specified herein, necessary for the completion of the gate operator system as detailed on the Construction Plans and within the Specifications. Cable in unit duct related to the electric feeder for each gate operator shall be paid for under Item 108.

The gate operator systems for Gate No. 1 (the 20 foot clear opening gate) and Gate No. 2 (the 24 foot clear opening gate) shall each include the following features:

- ❖ New slide gate with operating hardware, gate hydraulic operator, heater, controller, and detector amplifiers.
- ❖ New card reader station. Include 125 sequentially numbered cards with card reader for each gate operator.
- ❖ Each gate shall be a card reader access entry/free exit gate.
- ❖ Each gate shall have an automatic closing feature activated by an adjustable timer. Safety loops shall be provided at both sides of the gate to delay the closing of the gate in the event that it detects that the vehicle has not yet passed through the gate. The inner loop shall also provide automatic opening to exit upon detection of a vehicle.
- ❖ Include audible beeper on each gate operator for indication of gate activation and movement.
- ❖ Provide five (5) remote control transmitter units for automatic gate operation and respective receiver unit on each gate operator.
- ❖ Power for each gate operator shall be from a 208Y/120 VAC, 3-phase, 4-wire power source located as detailed on the Plans.
- ❖ Controls and associated control wiring shall be as shown on the Plans and detailed herein.
- ❖ Include surge protection on each gate operator and associated control systems.

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162700-2.1 MATERIALS. All equipment and materials used in the construction shall be in accordance with the specifications and detailed instructions as furnished by the manufacturer. The Contractor shall furnish shop drawings for approval before ordering material

- (a) Gate. Gate construction shall comply with ASTM F1184. The gate frame shall be fabricated from 6063-T6 aluminum alloy extrusions or 6061-T6 structural grade aluminum alloy tubing. The gate shall be metal framed manufactured of aluminum, with cross bracing, and covered with chain link fence fabric, sliding-gate, cantilever-type, capable of spanning the prescribed clear opening, **6 feet in height** and have an enclosed roller assembly to be protected from freezing rain and snow. Fabric shall be 2-inch diamond mesh steel wire, interwoven, minimum 9 gauge thick, top selvage knuckle end closed, bottom selvage twisted tight barbed or knuckle end closed, vinyl coated green in color, conforming to Item 162. Gate shall include barbed wire on the top as specified in Item 162. Fittings, sleeves, bands, clips, rail ends, tension bars, fasteners, and additional miscellaneous fittings shall be galvanized steel, vinyl coated green in color. Gate posts shall be fabricated from round galvanized steel pipe with outside dimensions and minimum weight according to ASTM F1184 for Type II Gate Opening Width: Over 12 feet but not over 30 feet. Gate posts shall be 4-inch minimum outside diameter. Gate posts and frames shall be vinyl coated, green in color as specified in Item 162. Contractor shall confirm color selection with the Resident Engineer prior to manufacture. Gate shall be a Fortress Heavy Duty Cantilever Slide Gate as manufactured by Tymetal Corporation, 2566 State Route 40, Greenwich, New York 12834, Phone: 1-800-328-4283 or 518-692-9930, Fax: 518-692-9404, or approved equal.

- (b) Operator. The hydraulic operator shall be equipped with a minimum one (1) horsepower electric motor capable of operating cantilever gate up to 50 feet in overall length weighing up to 2,000 pounds with a drive rail draw force requirement of no less than 300 pounds without the drive wheels slipping and without distortion of supporting arms. Gate operator velocity shall be approximately 1 feet per second. Gate operators shall be properly sized and compatible with the respective gate furnished. Gate operators shall be equipped with a heater to allow operation within a temperature range of -40°F to +140°F ambient temperature, in rain, snow, sun, and high humidity. Include audible beeper on the gate operator for indication of gate activation and movement. The operator shall consist of the motor starter and all relays required from the operation outlined herein. The operator and components shall be factory assembled and wired so as to require only field connections of the card reader/keypad access station, loops, and system power supply. The operator housing shall be weatherproof, fabricated from steel with a corrosion resistant, powder coated paint finish green to match the fence materials and shall completely enclose the motor and electrical components of the unit. Appropriate time delays shall be incorporated for safe gate operation. Gates shall close automatically after an extensive adjustable delay period, unless manually disabled. The gate operator shall be UL-listed or ETL-listed to have met requirements of UL 325, (Fourth Edition), Standard for Safety for Door, Drapery, Gate, Louver and Window Operators and Systems and the applicable requirements of UL-991 (Second Edition), Standard for Tests for Safety-Related Controls Employing Solid State Design. The proposed gate operator shall Hy-Security Model 222E-ST or approved equal. Supply voltage for the gate operator shall be 208 VAC, 3 phase, 3-wire with ground.

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Include AC secondary surge arrester at the point of the input power connection to the gate operator. Secondary surge arrester shall be UL-listed and shall be suitable for 208 VAC, 3 phase, 3 wire with ground system originating from a 208/120 VAC, 3 phase, 4 wire system, line to line, and line to ground protection modes with a surge current rating of 75,000 Amps maximum 8 x 20 microsecond wave per mode, Ditek Corporation, Model DTK-208-3CMX PLUS, or approved equal. Surge arresters shall have a lifetime product replacement warranty.

The gate operator foundation will be a minimum of 48 inch depth, to the dimensions recommended by the manufacturer. Foundation shall be constructed of concrete conforming to Item 610. The concrete must have strength of 3,000 psi after 14 days. Anchor bolts shall be per the gate operator manufacturer's requirements.

- (c) Card Station. Card station shall be furnished by the gate operator manufacturer's representative for the purpose of coordinating compatibility between the gate operator and the card reader unit. Contractor shall ensure compatibility between the gate operator control voltages, the card reader input voltage (where applicable), and the respective control interface. Contractor shall include interfacing relays and/or transformers as applicable. Card station shall be a magnetic type card reader, weather resistant for outdoor installation over an ambient temperature range of -40°F to +140°F, surface mount housing with appropriate adapters and hardware to install on a slant stand or gooseneck type pedestal. Card stations shall exclusively accept one type of card. The card station shall be constructed as detailed on the Plans and in accordance to the manufacturer's specifications. The concrete foundation for the reader shall be a minimum of 48 inches below ground level and to the dimensions recommended by the manufacturer. The concrete shall have the same requirements of the operator foundation. Card station shall be Federal APD, Federal Signal Corporation, (42775 Nine Mile Road, Novi, Michigan 48375, Phone: 1-800-521-9330 or 248-374-9600, Fax: 248-374-9610) Model KK IV or an approved equal. Coordinate card types and programming with the Airport Manager.

Where the card reader requires a power supply, include low voltage line protector on the card reader. Low voltage line protector shall be suitable for use on the respective control voltage system used in the card reader, AC or DC protection modes (as applicable) on all lines with a surge current rating of 3000 Amps (maximum). Low voltage line protector for 12 VDC, 24 VDC, or 24 VAC applications shall be Ditek Corporation, Model DTK-4LVLP-CR, or approved equal.

- (d) Detector Amplifiers. Detector amplifiers shall consist of digital design units capable of automatic tuning, pulse and presence outputs, excellent stability and accuracy, with long-term reliability. The device shall be 100 percent solid-state construction, with plug-in and plug-out circuits for rapid repair. The unit shall constantly monitor the frequency of the loop, and compare and adjust automatically for changes, such as loop aging, moisture, mechanical deterioration, and foreign bodies in the loop area. Detector amplifiers shall contain lightning protection and be capable of total loop isolation. Amplifiers shall be mounted in or on the outside of the gate controller housing. Weatherproof enclosures, when required, shall be of NEMA-4 design, powder coated finish green to match fence materials.

The amplifiers shall be capable of stable operation and automatic tuning over a range of minus 40°F to plus 180°F. Loop detectors shall be selective as to direction of travel of vehicle with

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respect to the instantaneous position of the gate, i.e., close loops will activate system only with gate in open or opening state. Open loop will activate gate only with gate in closed or closing state. Detector amplifiers shall be compatible with the respective power source available or have voltage transformers to provide the proper power source. Detector amplifiers shall be Model B Series as manufactured by Reno A&E, 4655 Aircenter Circle, Reno, Nevada 89502, Phone: 775-826-2020, Fax: 775-826-9191, or an approved equal. Contractor shall verify the selected loop detector is suitable for the respective gate installation.

Loop detector wiring shall be as specified by the manufacturer furnishing the detector amplifiers.

- (e) Power Source. Power for the gate operator shall be from 208/120 VAC, 3 phase, 4 wire panelboard located as detailed on the Plans. Power to the gate operator will be 208 VAC, three phase with equipment ground wire as detailed on the Plans and in accordance to the gate operator's manufacturer's recommendations. The 208 VAC feeder cable from the power source to the gate operator shall be as detailed on the Plans and Item 108 and will be paid for under Item 108. The Contractor will be responsible for providing all necessary material for the installation of electrical power and control wiring from the from the gate operator to the card reader, and from the gate operator to the detector loops. It will also be the Contractor's responsibility to locate, identify and protect all existing utilities. Any damage to these utilities will be immediately repaired at the Contractor's own expense.
- (f) Control Wiring. Control wires between devices shall be copper, Type THWN, No. 14 minimum, color coded and tagged with wire markers for easy identification.

Induction loop feed wires shall be copper, No. 12 minimum, Twin-Twisted-Shielded, meeting the State of Illinois, Department of Transportation, specifications.

Induction loop wire shall be copper, with Teflon insulation, meeting all the requirements of manufacturer of the Detector Amplifier specified above.

Wire shall be as manufactured by General Cable, Inc., Anaconda, or an approved equal.

One (1)-inch Galvanized Rigid Steel conduit will be required for all control wires from outside the pavement area to the operator, from the keypad access control station/card reader to the operator, and from the operator to the loops. All metal conduits entering the gate operator shall be bonded to the frame of the gate operator.

- (g) Remote Receiver. The Contractor shall provide a remote receiver for each gate operator. Remote receiver shall have frequency as specified by the Airport Manager. Frequency is recommended to be within the range of 800 MHz to 1.7 GHz, or per the respective gate operator representative's recommendation to ensure proper operation at the respective location of each installation. Remote receiver shall have proper shielding to eliminate potential problems caused by stray radio frequency interference or noise. Remote receiver shall be high quality and capable of being activated by the respective transmitter at a distance of up to 250 feet. The contractor is responsible to provide a properly operating receiver and transmitter pair for each gate operator.

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- (h) Remote Transmitters. The Contractor shall provide with each of the Remote Receivers, **five remote transmitters** for use by airport personnel or other authorized personnel.
- (i) Safety Switches. Furnish and install a safety switch for the respective gate operator as detailed on the Plans and specified herein. Safety switches shall be heavy duty, UL-listed, with amperage, voltage, number of poles, and type (fusible or not fusible), and accessories as detailed on the Plans. Safety switches shall be pad lockable in the off position. Include ground lugs or grounding kits with all safety switches. Safety switches located outdoors, or in damp areas shall be in NEMA 3R and 12 or NEMA 4X enclosures without knockouts. Safety switches located in hazardous classified areas shall be UL-listed or FM approved as suitable for the respective location. Safety switches shall be as manufactured by Square D, or equivalent.
- (k) Fuses. Fuses shall be the size and type as shown on the Plans. Fuses shall be manufactured by Bussmann or Littlefuse. Furnish two additional fuses of each size and type used on the project, for use as spares.
- (l) Galvanized Rigid Steel Conduit. All galvanized rigid steel conduit and couplings shall conform to Federal Specification WW-C-581 and conform to Item 110; conduit and fittings shall also conform to the requirements of UL 6 and UL 514B.
- (m) Liquid Tight Flexible Metal Conduit. Liquid-tight flexible metal conduit shall consist of polyvinyl jacket over flexible hot dip galvanized steel tubing. The flexible conduit shall be completely sealed from liquids, dust, dirt, and fumes, and be resistant to oil, gasoline, grease, and abrasion. Jacket shall also be sunlight resistant. Liquid-tight flexible metal conduit shall be UL-listed, suitable for use as a grounding conductor, and comply with Article 350 of the 2002 NEC. Liquid-tight flexible metal conduit shall be Anaconda Sealtite Type UA as manufactured by Ananmet Electrical Inc., 1000 Broadway East, Mattoon, IL 61938-0039, Liguatite Type LA as manufactured by Liguatite 222 W. Central Ave., Roselle, IL 60172, or approved equal.
- (n) Schedule 40 PVC Conduit. Schedule 40 PVC conduit shall comply with Item 110 and the following: Conduit shall be Schedule 40 PVC, 90°C, UL-rated or approved equal. Material shall comply with NEMA Specification TC-2 (Conduit), (Fittings UL-514), and UL-651 (Standard for rigid nonmetallic conduit). The conduit and fittings shall carry a UL label (on each 10 foot length of conduit and stamped or molded on every fitting). Conduit and fittings shall be identified for type and manufacturer and shall be traceable to location of plant and date manufactured. The markings shall be legible and permanent.

The conduit shall be made from polyvinyl chloride C-300 compound that includes inert modifiers to improve weather ability, heat distortion. Clean reworked material, generated by the manufacturer's own conduit production, may be used by the same manufacturer, provided the end products meet the requirements of this Specification. The conduit and fittings shall be homogenous plastic material free from visible cracks, holes, or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks, or other imperfections which could mar conductors or cables. Conduit fittings and cement shall be produced by the same manufacturer to assure system integrity and shall be Carlon Plus 40 conduit or equal.

SPECIAL PROVISIONS

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- (o) Junction and Pull Boxes. Unless otherwise noted on the Plans, all junction boxes shall be 16-gauge minimum construction. Surface mounted exterior junction and pull boxes located in non-hazardous, non-classified areas, shall be NEMA 4X stainless steel or aluminum, Hoffman, or approved equal. Flush-mounted exterior boxes located in non-hazardous, non-classified areas, in floors, walkways, and walls shall be NEMA 4, cast aluminum, Crouse-Hinds, Hubbell-Killark, or approved equal, and shall be supplied with asphalt paint applied to all surfaces imbedded in concrete. All junction and pull boxes installed in classified hazardous areas (Class I, Division 1 or 2, Group D) shall be NEMA 7 and shall comply with applicable provisions of the NEC including, but not limited to, Articles 500 and 501. Junction and pull boxes shall be sized as required for conductors and splices and per 2002 NEC Article 314. Boxes shall be UL-listed. Special boxes made to suit conditions shall be used to accommodate the respective application or where required by National Electrical Code even though they might not be indicated on the Plans.
- (p) Ground Rods. Ground rods for electrical installations shall be 3/4-inch diameter by 10-foot long, UL-listed, copper clad with 10-mil minimum copper coating. Ground rods for fence grounding shall be 5/8-inch diameter by 10-foot long, UL-listed, copper clad with 10-mil minimum copper coating.
- (q) Legend Plates. Legend plates shall be required for all safety switches, individual circuit breakers, disconnects, etc. Legend plates shall be provided to identify the equipment controlled, the power source, the voltage system, and the function of each device. Legend plates shall be weatherproof and abrasion resistant phenolic material. Lettering shall be black letters on a white background, unless otherwise noted.
- (r) Shop Drawings. Shop drawings are required for the electric gate. **Note: shop drawings that are submitted that do not include all of the following listed requirements will be rejected and will require resubmittal. Contractor shall use the following as a check list and shall verify all information noted below is included with the respective electric gate shop drawing prior to submitting the shop drawing for review. Shop drawing shall be clear and legible. Copies that are illegible will be rejected. Separate shop drawings shall be prepared for each electric gate.** Contractor shall submit sufficient copies of shop drawings to meet the needs of his personnel, sub-contractor personnel, and equipment suppliers plus six copies to be retained by the Project Engineer. Shop drawings shall include the following information:
1. Cut Sheets and specifications for the slide gate including manufacturer's name, address, and phone number, drawing of the gate with dimensions, detail of the enclosed roller assembly, gate post requirements, gate frame material, and details on the fence fabric.
 2. Cut sheets and specifications for the gate operator. Include manufacturer's name, address, phone number, gate operator model number, gate operator UL listing or ETL listing, gate load capability and drive rail force requirements, traveling speed, housing data, input voltage, motor horsepower rating, full load amperage requirements, manufacturer's recommended wiring requirements, and respective options, (heater option, audible beeper option, etc.).

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3. Include information, specs, and cut sheets for the surge suppressor included with the gate operator.
4. Provide data sheets for the card reader. Include manufacturer's name and model number for the respective access control unit. Include information for the low voltage line protector that is required to be included with each card reader.
5. Provide data sheets for the detector amplifiers with manufacturer's name and model number. Include lightning protection on the detector amplifiers.
6. Provide data sheets on the loop/lead-in cables.
7. Provide cut sheets, information, voltage rating, amperage rating, manufacturer's catalog number, fuse size and manufacturer catalog number, and options for the 30 amp, 3 pole, 240 VAC, UL listed heavy duty safety switch in a NEMA 3R (rain tight) and NEMA 12 (dust tight) enclosure that is for the gate operator.
8. Provide a cut sheets for all types of conduit used with the electric gate (for example galvanized rigid steel conduit, Schedule 40 PVC conduit, and UL listed liquid tight flexible metal conduit).
9. Provide cut sheets with manufacturer's name, catalog number, dimensions, material, and UL listing for each type and size of ground rod used with the electric gate installation.

CONSTRUCTION METHODS

162700-3.1 AIRPORT SECURITY. The Contractor will place barricades across the gate opening whenever the existing or proposed gate cannot be closed at the end of the construction day.

162700-3.2 SPLICES. Splices, where allowed, shall be the resin encapsulating type, suitable for direct burial, and be as manufactured by 3-M, Burndy, or equal.

162700-3.3 MATERIALS FURNISHED BY THE CONTRACTOR. All materials used in this item shall meet the requirements of the respective specifications and no material shall be used until it has been approved by the Project Engineer by means of shop drawings. All materials not otherwise specifically indicated shall be furnished by the Contractor. All materials furnished by the Contractor shall be new.

162700-3.4 STORAGE OF MATERIALS. Materials shall be so stored as to insure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and they shall be placed under cover. Stored materials shall be located so as to facilitate prompt inspection. Storage location shall be approved by the Resident Engineer.

162700-3.5 MANUFACTURER'S DIRECTIONS. Manufactured articles, material and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer unless herein specified to the contrary.

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162700-3.6 CUTTING AND PATCHING. The Contractor shall do all necessary cutting and patching of the pavement that may be required by the Plans and Special Provisions and manufacturer's drawings and specifications as necessary to complete the Item. The Contractor shall restore all such cut or patched areas as directed by the Resident Engineer. Cutting of existing structures that may endanger the Work, adjacent property, workmen or the public shall not be permitted.

162700-3.7 CLEAN UP. The Contractor shall remove from the Owner's property and from all public and private property, all temporary structures, rubbish and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials, leaving the site smooth, clean, and true to line and grade.

162700-3.8 GUARANTY PERIOD. Neither the final certificate of payment nor any provision in the Contract, nor partial or entire use of the improvements embraced in this Contract by the Owner or public shall constitute an acceptance of Work not performed in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the Work and pay any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the Work. The Owner shall give notice of defective materials and work with reasonable promptness. The guarantee applies to mechanical equipment furnished as well as to all other work and materials.

162700-3-9 ELECTRIC SLIDE GATE CONSTRUCTION. The Contractor shall install the electric slide gate as detailed on the Plans and in accordance with the manufacturer's directions. The Contractor will be responsible for the construction of any and all concrete bases for the proposed gate operator and card reader.

162700-3.10 GATE CONTROL EQUIPMENT. Installation of all electrical equipment and all gate control equipment shall be in conformance with the requirements of the National Electrical Code (most current issue in force), the respective equipment manufacturer's directions, and in strict accordance with the requirements of all local authorities having jurisdiction. All keypad access control units, card stations, operators, and controllers shall be grounded to prevent shock. All concrete work required, and the precise locations for the installation of the gate controller/operator, keypad access control station/gate card reader, and induction loops, shall be coordinated with the manufacturer's shop drawings.

New loop detector wiring shall be as specified by the manufacturer furnishing the detector amplifiers.

The induction loops shall be equipped with appropriate equipment to operate properly for large trucks and not have a tendency to close the gate onto vehicles parked in the gate opening.

Induction loops shall be installed in saw-cut grooves in the road surface; such grooves of length, width, and depth as required by the manufacturer of the loop control equipment.

Loop wires shall be held in place in the asphalt pavement by covering slot with a sealer such as #E707 by Bondo, or #491 HP by Euclid Chemical Company or an approved equal.

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162700-3.11 ELECTRICAL GENERAL. The Contractor shall furnish and install all electrical materials necessary for complete and operational installation of the gate operator, as stipulated in the respective item and as shown on the Plans. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the National Electrical Code (most current issue in force), the respective equipment manufacturer's directions, and all other applicable local codes, laws, ordinances, and requirements in force. Electrical equipment shall be installed in conformance with the respective manufacturer's directions and recommendations for the respective application. Any installations which void the UL listing, ETL listing (or other third party listing), and/or the manufacturer's warranty of a device shall not be permitted.

The Contractor should examine the proposed site to evaluate the complexity of the work.

Contractor shall coordinate work and any power outages to buildings or facilities located on the airport with the Airport Manager and/or the respective building/facility personnel.

Splices in conductors will be allowed only within the specified junction boxes or splice cans. Only splices between loop lead-in wires and the Twin-Twisted-Shielded conductors are approved. Circuit conductors for power wiring shall be continuous from source of power to connected device (from the respective panelboard or load center to the safety switch at the gate operator).

The Contractor shall be responsible for furnishing and setting all anchor bolts required to install his equipment.

Where concrete mounting pads are required for equipment mounting, the Contractor shall furnish all concreting and form work necessary to complete the installation.

Where electrical equipment is located on damp or wet walls or locations as directed, it shall be "stand-off" mounted ½ inch from the wall in a manner so that the rear of the equipment is freely exposed to the surrounding air. The Resident Engineer shall approve the method of mounting before equipment is mounted.

162700-3.12 INSTALLATION OF SAFETY SWITCHES. All safety switches shall be provided with appropriate mounting hardware and strut support. Strut support shall be hot dipped, galvanized steel strut support, Unistrut P-1000 HG, or approved equal. Provide zinc rich paint applied to field cuts of strut support to minimum the potential for corrosion per the respective strut support manufacturer's recommendation. All hardware shall be corrosion resistant.

Mount safety switches securely in accordance with the manufacturer's recommendations/instructions and as required for the respective application. Inspect all safety switches for proper operation, tight and secure connections, and correctness. All safety switch enclosures shall be bonded to ground with a ground lug or bar and ground wire. Field cut holes in safety switch enclosures to accommodate conduit entrances. Where safety switches are provided with concentric knockouts, and the respective conduit does not use the largest knockout, install a grounding bushing with ground wire connections between the bushing and the ground bus. Do not use safety switch enclosures for a splice box or for a pull box. Do not route control wires or other circuit wiring through a safety switch. Where splices are required or other control circuit wires are installed in the respective conduit to a safety switch, provide a separate junction box to accommodate the splices and/or other circuit conductors.

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Provide NEMA 4 hubs for all conduit entries into safety switch enclosures that are rated NEMA 4, 4X to maintain NEMA 4, 4X rating. Provide weatherproof abrasion resistant, engraved legend plates for each safety switch noting the device served, the power source, and the voltage system.

162700-3.13 CONDUIT INSTALLATION. Cable in unit duct and/or conduit for the gate operator power shall be direct bury 24 inch minimum below finished grade. Cable in conduit below roadways and walks shall be minimum 24 inch deep. Installation of cable in unit duct and/or conduit shall conform to Item 108. Installation of conduit shall conform to Item 110, as detailed on the Plans and as specified herein.

All conduit(s) under walks shall be pushed.

Conduit size and fill requirements shall comply with Appendix C, conduit fill tables, of the NEC. It should be noted these are minimum requirements and larger conduit sizes or smaller fill requirements shall be used whenever specified or detailed on the drawings.

Liquid-tight flexible conduit shall be provided as a connection between each motor junction box (or any other piece of equipment subject to movement or vibration) and the rigid conduit system.

Ream conduits only after threads are cut. Cut joints square to butt solidly into couplings. Where necessary to join two pieces of conduit, and it is impossible to use standard couplings, use 3-piece malleable iron conduit coupling. The use of running thread is prohibited. This applies to all rigid conduit installations, underground or otherwise.

Make all joints in steel underground conduit watertight with approved joint compound. Temporarily plug conduit openings to exclude water, concrete, or any foreign materials during construction. Clean conduit runs before pulling in conductors.

A run of conduit between outlet and outlet, between fitting and fitting, or between outlet and fitting shall not contain more than the equivalent of four quarter bends, including bends immediately at an outlet or fitting.

Where conduits enter a box or fitting, provide a steel locknut and an insulated metallic bushing. Use this method to terminate conduit in panels, pull boxes, safety switches, etc.

Provide NEMA four hubs for all conduit entries into enclosures rated NEMA 4, 4X to maintain NEMA 4, 4X rating.

Do not run conduit below or adjacent to water piping.

Run exposed conduits parallel with walls and at right angles to the building lines, not diagonally. Make bends and turns will pull boxes or cadmium plated or hot-dipped galvanized malleable iron fittings and covers.

162700-3.14 INSTALLATION OF JUNCTION AND PULL BOXES. Use only screws, bolts, washers, etc. fabricated from rust resisting metals for the supporting of boxes. Install pull boxes in runs of conduit such that a total of 360 degrees in bends is not exceeded. Junction boxes shall be installed at all points in conduit runs where taps or splices are located. Boxes required by code or need which are not

detailed on the plans shall be considered incidental to the respective work item and will not be paid for separately.

162700-3.15 GROUNDING REQUIREMENTS. Grounding shall conform to the following, as applicable:

The Contractor shall furnish and install all grounding shown on the Plans and/or as may be necessary or required to make a complete grounding system as required by the latest National Electrical Code (NFPA 70) in force. The reliability of the grounding system is dependent on careful, proper installation and choice of materials. Improper preparation of surfaces to be joined to make an electrical path, loose joints, or corrosion can introduce impedance that will seriously impair the ability of the ground path to protect personnel and equipment and to absorb transients that can cause noise in communications circuits. The following functions are particularly important to ensure a reliable ground system:

- (a) All products associated with the grounding system shall be UL-listed and labeled.
- (b) All bolted or mechanical connections shall be coated with a corrosion preventative compound before joining, Dearborn Chemical Company "No-Oxide A" compound or equal.
- (c) Metallic surfaces to be joined shall be prepared by the removal of all non-conductive material, per 2005 National Electrical Code Article 250-12.
- (d) Raceway fittings shall be made up tight to provide a permanent low impedance path for all circuits. Metal conduit terminations in enclosures shall be bonded to the enclosure with UL listed fittings suitable for grounding. Provide grounding bushings with bonding jumpers (from bushing to the respective ground connection/enclosure frame) for all metal conduits entering service equipment (meter bases, CT cabinet, service disconnects, service panelboards, main service breaker enclosure, etc.). Provide grounding bushings with bonding jumpers for all metal conduits entering an enclosure through concentric or eccentric knockouts that are punched or otherwise formed so as to impair the electrical connection to ground. Standard locknuts or bushings shall not be the sole means for bonding where a conduit enters an enclosure through a concentric or eccentric knockout.
- (e) Furnish and install ground rods at all locations where shown on the Plans or specified herein. Ground rods for electrical installations shall be 3/4 inch diameter, 10 feet long, UL-listed, copper clad with 10-mil minimum copper coating. Ground rods for fence grounding shall be 5/8 inch diameter, 10 feet long, UL-listed, copper clad with 10-mil minimum copper coating. Top of ground rods shall be a minimum of 30 inch below finish grade unless otherwise noted on the Plans. Ground rods shall be spaced as detailed on the Plans and in no case spaced less than one rod length apart. All connections to ground rods and/or ground rings shall be made with exothermic weld type connectors, Cadweld by Erico Products, Inc., Solon, Ohio, (Phone 1-800-248-9353), or Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (Phone 918-663-1440). Exothermic weld connections shall be installed in conformance with the respective manufacturer's directions using molds as required for each respective application. Bolted connections will not be permitted at ground rods or at buried grounding electrode conductors. Grounding electrode conductors shall be bare stranded copper sized as detailed on the Plans.

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- (f) All connections, located above grade, between the different types of grounding conductors shall be made using UL-listed double compression crimp type connectors or UL-listed bolted ground connectors. For ground connections to enclosures, cases and frames of electrical equipment not supplied with ground lugs the Contractor shall drill required holes for mounting a bolted ground connector. All bolted ground connectors shall be Burndy, Thomas and Betts, or equal. Tighten connections to comply with tightening torques in UL Standard 486A to assure permanent and effective grounding.
- (g) All metal equipment enclosures, conduits, cabinets, boxes, receptacles, motors, etc. shall be bonded to the respective grounding system.
- (h) Each feeder circuit and/or branch circuit shall include an equipment ground wire. The equipment ground wire from equipment shall not be smaller than allowed by 2005 NEC Table 250-122 "Minimum Size Conductors or Grounding Raceway and Equipment." When conductors are adjusted in size to compensate for voltage drop, equipment-grounding conductors shall be adjusted proportionately according to circular mil area. All equipment ground wires shall be copper either bare or insulated green in color. Where the equipment grounding conductors are insulated, they shall be identified by the color green and shall be the same insulation type as the phase conductors.
- (i) Bond the main electrical service neutral to ground at the main service disconnect. Bond the service neutral to ground at one location only per the National Electrical Code. A grounding connection shall not be made to any neutral circuit conductor on the load side of the service disconnecting means, except as permitted by 2005 NEC 250-24.
- (i) All exterior metal conduit, where not electrically continuous because of manholes, handholes, non-metallic junction boxes, etc., shall be bonded to all other metal conduit in the respective duct run, and at each end, with a copper bonding jumper sized in conformance with 2002 NEC 250-102. Where metal conduits terminate in an enclosure (such as a motor control center, gate operator, switchboard, etc.) where there is not electrical continuity with the conduit and the respective enclosure, provide a bonding jumper from the respective enclosure ground bus to the conduit sized per 2005 NEC 250-102.
- (k) Furnish and install a 5/8 inch diameter, 10 feet long, UL-listed, copper clad ground rod within 100 feet of the gate on each side of gate as detailed on the Plans. Top of each ground rod shall be buried 30 inches below grade. Bond the fence fabric to the respective ground rod with a #8 AWG (minimum) bare solid copper conductor. Connection to the ground rod shall be exothermic weld. Connection to the fence fabric shall be with UL listed bronze ground connectors with bronze or stainless steel bolts and washers.
- (l) Install grounding electrode conductors and/or individual ground conductors in Schedule 40 or Schedule 80 PVC conduit. Where grounding electrode conductors or individual ground conductors are run in PVC conduit, Do Not completely encircle conduit with ferrous and/or magnetic materials. Use non-metallic reinforced fiberglass strut support. Where metal conduit clamps are installed, use nylon bolts, nuts, washers and spacers to interrupt a complete metallic path from encircling the conduit.

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162700-3-16 TESTING. The Contractor shall make at his own expense any tests of equipment, wiring, or insulation deemed necessary by any inspection department or by the Contractor Officer and shall provide all apparatus, meters, materials, and labor required to make such tests.

The Contractor shall test and demonstrate to the satisfaction of the Engineer the following:

- (a) That all power and control circuits are continuous and free from short circuits.
- (b) That all circuits are free from unspecified grounds.
- (c) That the insulation resistance to ground of all ungrounded conductors of multiple circuits is not less than 50 megohms.
- (d) That all circuits are properly connected in accordance with applicable wiring diagrams.
- (e) Test and adjust gate operator, controls, safety devices/features, hardware, and other operable components. Confirm that all circuits operate properly.
- (f) Interrupt power to the gate operator and confirm that the gate does not open upon restoration of power. The gate operator shall not activate for a power interruption as it does for a card reader signal input.
- (g) Train the designated owner's personnel on procedures for operation, starting, stopping, troubleshooting, servicing, and maintaining equipment.
- (h) All tests shall be recorded, stating the wire circuit reading, date, and field conditions. Copies of the tests shall be provided to the Resident Engineer.

METHOD OF MEASUREMENT

162700-4.1 The quantity of this item to be furnished and installed shall be measured for payment as a unit price per each for each opening size of electric gate, and shall include all materials, equipment, cable, conduit, ducts, directional boring, grounding, labor, utility coordination, tools, connections, and other incidentals as required to perform the specified work and testing the units for satisfactory operation. The quantity of power cable in unit duct from the power source to each gate operator shall be paid for under Item 108 as Gate Cables in Unit Duct.

BASIS OF PAYMENT

162700-5.1 Payment will be made at the Contract unit price per each for the card operated electric sliding gate for each opening size and shall be full compensation for all materials, labor and equipment, including gate frame and fabric, operator, card station, detector amplifier, card reader and cards, power and control wiring, remote receiver and transmitters, concrete foundations, conduit and wiring, testing and adjusting of the installation, and all incidental items necessary to complete the item for satisfactory operation, and no additional compensation will be allowed.

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Payment will be made under:

Item ASI 62720 Electric Gate 20' - per each.

Item ASI 62724 Electric Gate 24' - per each.

FLEXIBLE BASE COURSES

ITEM 201002

BITUMINOUS BASE COURSE - METHOD II
(Over 2,500 Tons/Pay Item/Location)

Revise Item 201 of the Standard Specifications and the Recurring Special Provision for Item 201002 as follows:

201-1.1 DESCRIPTION. Add the following:

"The Bituminous Base Course for all new pavements shall be placed upon an aggregate base prepared in accordance with Item 602 Bituminous Prime Coat.

"For purposes of materials and design criteria, this item is to be constructed for aircraft weighing less than 60,000 pounds."

COMPOSITION

201-3.2 JOB MIX FORMULA (JMF). Add the following to the beginning of the fourth paragraph:

"Mix Gradation B (1 inch maximum), Table 4, shall be used."

Add the following:

"For purposes of design criteria, this item is to be constructed for aircraft weighing less than 60,000 pounds."

BASIS OF PAYMENT

201-6.1 Add:

Payment will be made under:

Item AR201610	Bituminous Base Course - per ton.
Item AR201630	Bituminous Base Test Section - per each.

ITEM 209

CRUSHED AGGREGATE BASE COURSE

Revise Item 209 of the Standard Specifications and Supplemental Specifications as follows:

209-1.1 DESCRIPTION. Add the following:

"The Crushed Aggregate Base Course shall be placed upon a prepared subgrade in lifts of limited thickness as required in the Standard Specifications and to total uniform compacted thickness of 6-inches, 10-inches, or 12-inches, as shown in the Plans."

MATERIALS

209-2.3 GRADATION. Add the following:

"The gradation shall be Gradation B."

CONSTRUCTION METHODS

209-3.6 FINISHING AND COMPACTING. Add the following after the first paragraph:

"For the purpose of compaction control testing, this item is to be constructed for aircraft weighing less than 60,000 pounds (Standard Proctor standard)."

METHOD OF MEASUREMENT

209-4.1 Delete this Section. Section 209.4.2 of the Supplemental Specifications shall be used.

BASIS OF PAYMENT

209-5.1 Delete this Section and replace with the following:

"209-5.1 BASIS OF PAYMENT. Payment shall be made at the Contract unit price per square yard, per each thickness indicated in the Plans, for Crushed Aggregate Base Course. These prices shall be full compensation for furnishing all materials and for all preparation, operations, hauling, and placing of these materials, for furnishing certified scales, and for all labor, equipment, tools, and incidentals necessary to complete the item.

"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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

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"Payment will be made under:

"Item AR209606 Crushed Agg. Base Course - 6" - per square yard.
Item AR209610 Crushed Agg. Base Course - 10" - per square yard.
Item AR209612 Crushed Agg. Base Course - 12" - per square yard."

FLEXIBLE SURFACE COURSES

ITEM 401002

BITUMINOUS SURFACE COURSE - METHOD II
(Over 2,500 Tons/Pay Item/Location)

Revise Item 401 of the Standard Specifications and the Recurring Special Provision for Item 401002 as follows:

401-1.1 DESCRIPTION. Add the following paragraphs:

"Item 603 Bituminous Tack Coat shall be placed between this item and the Bituminous Base Course, and between the first and any subsequent lifts for this item, if applicable, in accordance with Item 603, and as approved by the Resident Engineer.

"For purposes of materials and design criteria, this item is to be constructed for aircraft weighing less than 60,000 pounds."

401-3.2 JOB MIX FORMULA (JMF). Add the following to the beginning of the fourth paragraph:

"Mix Gradation B (3/4 inch maximum), Table 4, shall be used."

Add the following:

"For purposes of design criteria, this item is to be constructed for aircraft weighing less than 60,000 pounds."

BASIS OF PAYMENT

Add:

Payment will be made under:

Item AR401610	Bituminous Surface Course - per ton.
Item AR401630	Bituminous Surface Test Section - per each.

ITEM 401650

BITUMINOUS PAVEMENT MILLING

Revise Item 401650 of the Recurring Special Provisions as follows:

DESCRIPTION

1.1 Add the following:

“The required milling varies in depth from 0 to 2 inches.”

4.1 Delete the last sentence of this section and replace with the following:

“Pavement milling necessary for butting new bituminous pavement with existing pavement to remain will be measured for pavement under this item.”

BASIS OF PAYMENT

5.1 Add the following:

“Payment will be made under:

“Item AR401650 Bituminous Pavement Milling - per square yard.”

ITEM 401665

BITUMINOUS PAVEMENT SAWING

401665-1.1 DESCRIPTION. This item shall consist of a saw cut at the extremity of bituminous pavements that are to be removed as shown in the Plans or as directed by the Resident Engineer. The depth of saw shall be full-depth or partial depth, as directed by the Resident Engineer.

401665-2.1 CONSTRUCTION METHODS. Prior to excavation, the existing pavement shall be saw cut at the locations shown in the Plans or as directed by the Resident Engineer. It shall be the Contractor's responsibility to determine the actual depth of pavement prior to this saw cut. The pavement to be sawcut will have a thickness of between three (3) and five (5) inches. During removal, should any of the pavement to remain be damaged due to a saw cut of insufficient depth, the damaged pavement shall be replaced in a manner satisfactory to the Resident Engineer. However, this pavement replacement shall not be measured for payment.

401665-3.1 METHOD OF MEASUREMENT. This item shall be measured in linear feet marked by the Resident Engineer prior to removal. Saw cutting outside the limits marked by the Resident Engineer will not be measured for payment.

401665-4.1 BASIS OF PAYMENT. Payment will be made at the Contract unit price per linear foot for bituminous pavement sawing, which price shall be full compensation for the labor, equipment, tools and incidentals necessary to complete the item as specified.

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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

Payment will be made under:

Item AR401665 Bituminous Pavement Sawing - per linear foot.

ITEM 401900

REMOVE BITUMINOUS PAVEMENT

Revise Item 401900 of the Recurring Special Provisions as follows:

DESCRIPTION

1.1 Add the following:

"The thickness of the bituminous pavement to be removed varies from 0 to 5 inches"

BASIS OF PAYMENT

5.1 Add the following:

"Payment will be made under:

"Item AR401900 Remove Bituminous Pavement - per square yard."

ITEM 401910

REMOVE AND REPLACE BITUMINOUS PAVEMENT

GENERAL

401910-1.1 This item shall consist of the saw cutting and removing of a portion of an existing bituminous pavement taxiway and replacement with new bituminous pavement at the location shown on the Plans and as directed by the Resident Engineer. This removal and replacement is to be furnished at separate times to allow for the installation of culvert pipe.

MATERIALS

401910-2.1 Materials used in completing this item shall meet the individual requirements of the Standard Specifications, Supplemental Specifications, Recurring Special provisions and these Special Provisions. Materials include:

- | | | |
|----|-------------------------------|-------------|
| a. | Bituminous Pavement Sawing | Item 401665 |
| b. | Excavation and Embankment | Item 152 |
| c. | Crushed Aggregate Base Course | Item 209 |
| d. | Bituminous Prime Coat | Item 602 |
| e. | Bituminous Base Course | Item 201 |
| f. | Bituminous Tack Coat | Item 603 |
| g. | Bituminous Surface Course | Item 401 |

CONSTRUCTION METHODS

401910-3.1 This item shall be completed in the following manner:

- a. Saw Cut. The limits of pavement to be removed and replaced will be marked by the Resident Engineer. Initial and secondary saw cuts shall be performed as shown in the Plans. It shall be the Contractor's responsibility to determine the depth of pavement prior to saw cutting to provide a full depth cut. Saw cutting will be measured separately for pavement under Item 401665.
- b. Removal. The pavement and base material within the patch area shall be excavated and disposed of by the Contractor at an off-Airport location. No additional compensation will be made for hauling and disposal of the removed material. During removal, should any of the pavement to remain be damaged, the damaged pavement shall be replaced in a manner satisfactory to the Resident Engineer. However, this additional pavement replacement shall not be measured for payment.

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- c. Subgrade Inspection. After the removal of base materials and completion of the culvert pipe or ductbank work, the subgrade will be inspected by the Engineer for its suitability. Should removal and replacement of unsuitable subgrade be required, the Contractor shall replace the subgrade with suitable excess excavated materials in accordance with Item 152. Subgrade replaced will be measured and payment will be made under Item 152.
- d. Crushed Aggregate Base Course. Aggregate base shall be placed as specified in Item 209 and as shown in the Plans. The Resident Engineer shall have a nuclear gauge and qualified operator on the Project for density testing and acceptance.
- e. Bituminous Prime Coat. Bituminous prime coat shall be applied as specified in Item 602.
- f. Bituminous Base Course. Bituminous base course shall be constructed in accordance with Item 201. The surface course shall be placed in one (1) lift of 2.0-inch thickness. The Resident Engineer shall have a nuclear gauge and qualified operator on the Project for density testing and acceptance.
- g. Bituminous Tack Coat. Bituminous tack coat shall be applied as specified in Item 603, when directed by the Resident Engineer.
- h. Bituminous Surface Course. Bituminous surface course shall be constructed in accordance with Item 401. The surface course shall be placed in one (1) lift of 2.0-inch thickness. The Resident Engineer shall have a nuclear gauge and qualified operator on the project for density testing and acceptance. The surface course shall reestablish the original grades and will be sloped to drain from the original crown.

METHOD OF MEASUREMENT

401910-4.1 The quantity to be paid for shall be the area in square yards measured in place, completed and accepted. The length and width for measurement will be the outside lines as marked by the Engineer prior to removal. Replacement of areas outside the limits marked by the Engineer will be completed in accordance with this item, but shall not be measured for payment.

With the exception of initial and final saw cutting, which will be measured and paid under Item AR401665, and unsuitable subgrade removed and replaced, which will be measured and paid under item 152, no other material or work will be separately measured for payment.

BASIS OF PAYMENT

401910-5.1 Payment will be made at the Contract unit price per square yard for pavement removal and replacement, which shall be full compensation for all labor, materials, equipment, tools and incidentals necessary to complete the item specified and accepted.

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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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

Payment will be made under:

AR401910 Remove & Replace Bit. Pavement - per square yard.

ITEM 501001

PORTLAND CEMENT CONCRETE PAVEMENT - METHOD I
(Less than or equal to 1,500 Cubic Yards)

Revise the Standard Specifications for Item 501 and the Recurring Special Provision for Item 501001 as follows:

MATERIALS

501-2.6 STEEL REINFORCEMENT. Delete this section and replace with the following:

“501-2.6 STEEL REINFORCEMENT. Reinforcement of panels as shown in the Plans shall be welded wire fabric of the size and dimensions shown in the Plans conforming to ASTM A185.”

501-2.9 COVER MATERIAL FOR CURING. Delete this section and replace with the following:

“501-2.9 COVER MATERIAL FOR CURING. Curing materials shall be a white pigmented liquid membrane-forming compounds for curing concrete conforming to the requirements of ASTM C309, Type 2.”

CONSTRUCTION METHOD

501-3.6(B) PROPORTIONS. Delete this Section in its entirety.

501-3.12 JOINTS. Add the following to (b) Installation:

“All joints shall be saw cut. Only diamond blade saws with water cooling and lubricating shall be used. No dry sawing or inserts will be allowed. Cost for saw cutting shall not be paid for separately but shall be incidental to concrete pavement.

“Protection of previously sawed joints from slip form operations shall be provided in the form of rubber mats or other means acceptable to the Resident Engineer.”

501-3.14 SURFACE TEXTURE. Add the following:

“The Project Engineer will select the type of finish (brush/broom, burlap, astroturf, etc.) to be furnished on the pavement surface based upon the Contractor’s selected construction method (side-form or slip-form) and the type of equipment to be employed.”

501-3.16 SURFACE TEST. Add the following:

“The Contractor shall furnish the Resident Engineer with the size and type of straightedge required to check the pavement components as directed in the various sections of the Specifications.”

501-3.21 OPENING TO TRAFFIC. Add the following:

“Prior to opening, the pavement shall be cleaned of all deleterious material. Sweeping shall be conducted in such a manner that dust will not affect operations at the Airport.”

BASIS OF PAYMENT

501-5.2 Delete this section and replace with the following:

“Payment will be made under:

“Item AR501506 6" PCC Pavement - per square yard.
Item AR501530 PCC Test Batch - per each.”

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

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ITEM 510

PAVEMENT INSERTS

GENERAL

510-1.1 This item includes the furnishing and installing of aircraft tie downs (mooring eyes) and ground rods in the completed concrete pavement at the locations shown on the Plans and as directed by the Resident Engineer.

MATERIALS

510-2.1 TIE DOWN (MOORING EYE). Each tie down includes the items shown on the Plans, as specified below:

- (a) Casting. The tie down shall be an iron casting shaped to the dimensions and with the holes shown on the Plans, Neenah Foundry Company Model R-3490-A, or equal. The Contractor shall alter the casting or bend the anchor rebar, as noted on the Plans, as required to position the rebar at the middle of the PCC slab thickness. This adjustment is incidental to the tie down.
- (b) Dowels. Dowel bars shall be #3 deformed reinforcement bars, IDOT approved, and bent as shown on the Plans.
- (c) Concrete. Concrete used in the shall be formed and shall meet the requirements of Item 610.

510-2.2 GROUND ROD. Each ground rod includes a copperweld rod, non-shrink epoxy grout and a weather-resistance paint, as shown on the Plans and as specified below:

- (a) Ground Rod. A ¾-inch diameter and 10 foot long copper bonded steel ground rod, U.L. listed. The electrolytic copper coating shall be metallically bonded to the rigid steel core. Copper coating shall be 10 mil minimum.
- (b) Grout. Non-shrink epoxy grout shall be a flowable nonmetallic grout and non-shrink when tested according to the applicable portions of the Corps of Engineers "Specification for Nonshrink Grout", CRD-C621. The maximum expansion allowable in this test at 3, 14 and 28 days is 0.4%. The expansion at 3 and 14 days shall not be greater than the expansion at 28 days. The grout shall have a compressive strength of not less than 3000 psi (20 MPa) at an age of 24 hours when tested using applicable portions of ASTM C109 (C109M). The compressive strength specimens shall be produced from a mixture of the dry grout and sufficient water to produce a flowable mixture. The initial set shall not be less than 60 minutes when tested under CRD-C82, "Method of Test for Time of Setting of Grout Mixtures", Corps of Engineers. The resistance of the grout to freeze thaw shall be such that it maintains a relative dynamic modulus of elasticity of not less than 80% after 300 cycles when tested according to AASHTO T161, Procedure B. The grout product may be accepted under certification that it meets the above requirements; however, the Division of Aeronautics retains the right to perform any or all of the tests as a condition of approval.

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- (c) Paint. Epoxy paint shall be used meeting the requirements of Item 620; however, color shall be red. Other suitable weather resistant paint may be used with the approval of the Resident Engineer.

CONSTRUCTION METHODS

- 510-3.1 TIE DOWN (MOORING EYE). Each tie down shall be installed at the locations shown on the Plans and as directed by the Resident Engineer. The casting shall be placed at the middle of the dowel bars.

The casting and anchor rebar may be set on the aggregate base with chairs or other assembly that will allow the top of the casting and rebar to sit at the proper finished elevation. The casting shall be flush with the finished pavement elevation. Anchor rebar shall be level and with a minimum cover of 2.5 inches. If the casting is placed prior to concrete placement, it shall be filled with sand to prevent the intrusion of concrete into the "hook" area.

If the casting and bars are placed in wet concrete, it shall be placed prior to final finishing is begun. A mechanical vibrator shall be used to consolidate concrete around the casting and associated reinforcement. The casting shall remain flush with the final pavement elevation.

- 510-3.2 GROUND ROD. The ground rod shall be installed after the concrete pavement has sufficiently hardened to prevent damage to the pavement from the coring operation. 4-inch diameter core holes shall be made at the locations shown on the Plans and as directed by the Resident Engineer. The Contractor shall dispose of the coring at an off-site location. Disposal shall be incidental to this item.

The ground rod shall be installed in each hole as shown in the details. The Contractor shall test the ground resistance with an instrument specifically intended to measure resistance in ground field systems. Testing shall be incidental to this item and shall not be paid for separately. If ground resistance exceeds 25 ohms additional ground rods shall be driven at the location and connected to the first ground rod until a resistance of less than 25 ohms is provided. All connections to ground rods shall be made with one shot, exothermic type connectors, Cadweld, or equal. Bolted connections will not be permitted. The Contractor will record all final readings for resistance measured at each ground rod and provide a report to the Resident Engineer as a part of the testing.

Payment for additional ground rods and counterpoise as may be required will be provided for in Section 20 of the Standard Specifications.

Upon acceptance of the test results, the boring hole shall be backfilled with grout to the elevations shown in the details. Grout shall be installed in accordance with manufacturer's recommendations.

Paint shall be applied on a cleaned surface and in accordance with Item 620. A template shall be used to provide a rounded circle centered over the boring hole. Painting for ground rods shall not be measured separately for pavement under Item 620 or these Specifications but shall be incidental to the ground rod.

METHOD OF MEASUREMENT

- 510-4.1 Tie Down and Ground Rod shall be inspected and, if acceptable, counted as individual units in place.

BASIS OF PAYMENT

510-5.1 Tie Down and Ground Rod shall be paid for at the Contract unit price per each accepted, which shall be full compensation for furnishing all materials and for all preparation and installation of these materials, testing, and for all labor, equipment, tools, and other incidentals necessary to complete this Work.

Payment will be made under:

Item AR510510	Tie Down - per each
Item AR510515	Ground Rod - per each.

ITEM 602

BITUMINOUS PRIME COAT

This item shall be provided in accordance with the Standard Specifications and Supplemental Specification for Item 602, Bituminous Prime Coat.

Payment will be made under:

Item AR602510 Bituminous Prime Coat - per gallon.

ITEM 603

BITUMINOUS TACK COAT

This item shall be provided in accordance with the Standard Specifications and Supplemental Specification for Item 603, Bituminous Tack Coat.

Payment will be made under:

Item AR603510 Bituminous Tack Coat - per gallon.

ITEM 605000

SILICONE JOINT SEALING FILLER

This item shall be provided in accordance with the Recurring Special Provision for Item 605000, Silicone Joint Sealing Filler.

Joint sawing and sealing for new PCC pavement shall be incidental to Item 501001, and no separate measurement or payment will be made for this work.

ITEM 610

STRUCTURAL PORTLAND CEMENT CONCRETE

This item shall be provided in accordance with the Standard Specifications and Supplemental Specification for Item 610, Structural Portland Cement Concrete.

No direct payment will be made for structural Portland cement concrete. The cost of furnishing and installing structural concrete shall be considered incidental to the Contract unit prices for the respective pay items utilizing the concrete.

ITEM 620

PAVEMENT MARKING

Revise Item 620 of the Standard Specifications and Supplemental Specifications as follows:

MATERIALS

620-2.2 PAINT. Add the following:

"Permanent white, yellow and red markings shall be of epoxy; permanent blue markings shall be of waterborne."

BASIS OF PAYMENT

620-5.1 Delete the last paragraph and replace with the following:

"Payment will be made under:

Item AR620530 Pavement Marking-Epoxy - per square foot.
Item AR620900 Pavement Marking Removal - per square foot."

ITEM 701

PIPE FOR STORM SEWERS AND CULVERTS

Revise Item 701 of the Standard Specifications and Supplemental Specifications as follows:

MATERIALS

701-2.1 GENERAL. Add the following:

"The type and class of pipe shall be as shown in the Plans, meeting IDOT Specifications.

"This item also includes the remove of existing pipe at the locations shown in the Plans.

"This item also includes the coring of one 3-inch drain connection in the culvert pipe."

CONSTRUCTION METHODS

701-3.7 BACKFILLING. Add the following:

"No additional compensation will be allowed for backfill material required outside the limits of the specified trench width."

701-3.8 CONNECTIONS. Add the following:

"When sewer installation requires tapping into an existing manhole, the hole shall be cored to allow for appropriate hole sizing. One connection is to be tapped directly into a new culvert pipe, which shall be cored. This work shall be considered installation to the installation of the pipe."

METHOD OF MEASUREMENT

701-4.1 METHOD OF MEASUREMENT. Add the following:

"Select granular material for trench backfill, as shown in the Plans, will not be measured but shall be included in the per linear foot price of the size and type of pipe installed.

"In areas were excavated earth material is used for backfill, as shown in the Plans, the Work shall not be measured for separate payment but shall be included in the linear foot price of the size and type of pipe installed."

BASIS OF PAYMENT

701-5.1 BASIS OF PAYMENT. Delete the last paragraph and insert the following:

"Payment will be made under:

"Item AR701430	30" RCP, Class III - per linear foot.
Item AR701512	12" RCP, Class IV - per linear foot.
Item AR701515	15" RCP, Class IV - per linear foot.
Item AR701518	18" RCP, Class IV - per linear foot.
Item AR701521	21" RCP, Class IV - per linear foot.
Item AR701524	24" RCP, Class IV - per linear foot.
Item AR701719	RCEP Span 38 Rise 24 - per linear foot.
Item AR701900	Remove Pipe - per linear foot."

ITEM 705

PIPE UNDERDRAINS FOR AIRPORTS

Revise Item 705 of the Standard Specifications as follows:

705-1.1 DESCRIPTION. Add the following:

“The underdrain pipe shall be wrapped with a filter fabric casing. A second Underdrain Trench Envelope surrounding the trench with the underdrain pipe and the porous granular material shall also be included. Where non-perforated pipe is specified, the fabric casing, porous material and trench fabric envelop shall not be provided.

“This item shall also include the installation of concrete underdrain inspection holes and underdrain cleanouts, as shown in the Plans and as specified below.

“This item also includes the removal of existing underdrain cleanout and inspection hole structures at the locations shown in the Plans and as directed by the Resident Engineer.”

MATERIALS

705-2.1 GENERAL. Delete Sections 705-2.2 through 705-2.11.

705-2.12 CORRUGATED POLYETHYLENE (PE) TUBING AND IGS FITTINGS. Delete this Section and replace with the following:

705-2.12 CORRUGATED POLYETHYLENE (PE) TUBING AND COUPLINGS AND FITTINGS. All underdrain shall be 6-inch perforated corrugated polyethylene (PE) pipe, **double wall** with a smooth inner surface, conforming to the requirements of AASHTO M 252, Type SP, Class 2. The underdrain shall be wrapped with a filter fabric casing, as noted in Section 705-2.13.

“Non-perforated tubing shall be 6-inch PE pipe without fabric casing, and used where shown in the Plans.”

705-2.13 FILTER FABRIC ENVELOPES FOR PERFORATED (PE) TUBING. Delete this section and replace with the following:

705-2.13 FILTER FABRIC CASING FOR PERFORATED (PE) TUBING. The fabric for encasing perforated corrugated polyethylene (PE) tubing may be either a knitted, woven or nonwoven fabric. The fabric casing shall be factory applied to the PE tubing. The filter fabric will not be measured separately but shall be included in the unit price for underdrain pipe.

“(a) Materials.

- (1) Knitted Fabric. Knitted fabric casing shall be an approved continuous one-piece knitted polyester material that fits over the PE tubing like a sleeve. It shall be knitted of continuous 150 denier polyester yarn and shall be free from any chemical treatment or coating that might significantly reduce porosity and permeability.
- (2) Woven or Nonwoven Fabric. The filaments for woven or nonwoven fabric shall be polypropylene, polyester, nylon or polyethylene. The filaments must be dimensionally stable (i.e., filaments must remain in 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. Nonwoven fabric may be needle punched, heat-bonded, resin-bonded or combinations thereof.
- (3) The physical properties for both knitted and woven or nonwoven fabric shall conform to the following:

Physical Properties (English)	Knitted	Woven or Nonwoven
Minimum Weight (oz./sq. yd.)	3.5 applied ASTM D3887 4.8 relaxed ASTM D3887	3.5 ASTM D-3776
Min. Wet Grab Tensile Strength (lbs.)	50 ASTM D-4632	100 ^{1/} ASTM D-4632
Grab Elongation @ Break (%)		20 min. ^{1/} ASTM D-4632
Equivalent Opening Size (EOS No.)	30 min. ^{2/} Corps of Engineers CW-02215	30 min. nonwoven ^{2/} 50 min. woven ^{2/}
Burst Strength (PSI)	100 min. ^{2/} ASTM D-3887	

Physical Properties (Metric)	Knitted	Woven or Nonwoven
Minimum Weight (g/m ²)	120 applied ASTM D3887 160 relaxed ASTM D3887	120 ASTM D-3776
Min. Wet Grab Tensile Strength (N)	225 ASTM D-4632	450 ^{1/} ASTM D-4632
Grab Elongation @ Break (%)		20 min. ^{1/} ASTM D-4632
Equivalent Opening Size (EOS No.)	600 μm min. ^{2/} Corps of Engineers CW-02215	600 μm nonwoven ^{2/} 300 μm min. woven ^{2/}
Burst Strength (PSI)	690 min. ^{2/} ASTM D-3887	

^{1/} For woven fabric, test results shall be referenced to orientation with warp or fill, whichever the case may be.

^{2/} Manufacturer’s certification to meet test requirements.

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“(b) Handling and Storage. The knitted fabric envelope shall be applied to the pipe underdrain in the shop so as to maintain a uniform applied weight. Woven and nonwoven fabric or underdrains with knitted fabric envelope shall be delivered to the jobsite in such manner as to facilitate handling and incorporation into the work without damage. Fabric envelope materials shall be stored in UV-resistant bags until just prior to installation. In no case shall the fabric be stored or exposed to direct sunlight that might significantly diminish its strength or toughness. Torn or punctured fabric envelope shall not be used.”

705-2.15 POROUS BACKFILL. Add the following:

“Porous backfill material shall meet the requirements for "Porous Material No. 2" shown in Table 1, or shall conform to the requirements for IDOT CA-14 or IDOT CA-16.”

Add:

705-2.16 CONCRETE. Concrete for connections to drainage structures or other miscellaneous items shall conform to Item 610, Structural Portland Cement Concrete.

Add:

705-2.17 ELASTOMERIC SEALS. Elastomeric seals shall conform to the requirements of ASTM F 477.

Add:

705-2.18 UNDERDRAIN TRENCH ENVELOPE. The trench for the underdrain pipe and porous material shall be wrapped in a nonwoven filter fabric envelope. The trench fabric shall be Mirafi 140N, by TC Mirafi, or equal, meeting the specifications for nonwoven fabric listed in Section 705-2.13. Alternate fabrics may be submitted for consideration by the Engineer. The filter fabric shall not be measured separately but shall be included in the unit price for underdrain pipe.

Add:

705-2.19 UNDERDRAIN INSPECTION HOLE AND CLEANOUT. Underdrain inspection hole and cleanout shall be as shown in the details and notes shown on the Plans. Concrete collar may be cast-in-place of concrete meeting Item 610 or pre-cast meeting IDOT Specifications for Class PC concrete. Pre-cast structures shall be from IDOT-approved sources. Frame and grate shall be as noted in the Plans. The area between the pipe and the frame opening shall be grouted and sealed with a cement mortar. Separate payment for the frame and grate, cement mortar and other incidentals shall not be made but shall be included in the unit price for inspection hole and cleanout.

Add:

705-2.20 PIPE/MANHOLE CONNECTIONS. Connections to the storm sewer system are to be made at manholes unless otherwise shown on the Plans. These connections shall be made through smooth holes in the manhole made at the proper invert elevation. Concrete conforming with Item 610 shall be used. Connections to structures shall not be paid for separately but shall be included in the Contract price for underdrain.

Add:

705-2.20 REMOVAL OF EXISTING INSPECTION HOLE AND CLEANOUT STRUCTURES. Existing inspection hole and cleanout structures shall be removed as shown in the Plans and as directed by the Resident Engineer. The concrete structure shall be disposed off an off-site location, with the disposal cost incidental to Remove Underdrain Inspection Hole or Remove Underdrain Cleanout. The pipe tubing shall be carefully cut to the indicated location and the pipe removed for the distance shown on the Plans or as directed by the Resident Engineer. New couplings shall be furnished for all pipe to be extended or rerouted. All pipe ends to remain that are not to be extended shall be provided with end caps installed in accordance with the manufacturer's recommendations. End caps and couplings used in this Work shall not be paid for separately but shall be included in the Contract unit price for Remove Underdrain Inspection Hole or Remove Underdrain Cleanout.

CONSTRUCTION METHODS

705-3.3 LAYING AND INSTALLING PIPE. Delete paragraphs (a), (b) and (c) and replace with the following:

"Underdrains using **perforated** corrugated polyethylene tubing shall be constructed as follows:

"(a) Trench. Trenches shall be excavated to the dimensions and grades required by the Plans or as directed by the Resident Engineer. In no case shall the width of trench exceed 12 inches. The trench depth shall include the 4-inch bedding to meet the pipe inverts shown on the Plans.

"(b) Trench Envelope Filter Fabric. The fabric envelope shall be delivered to the jobsite in such a manner as to facilitate handling and incorporation in the Work without damage. Fabric envelope materials shall be stored in UV-resistant covering until just prior to installation. In no case shall the fabric be stored or exposed to direct sunlight that might significantly diminish its strength or toughness. Torn or punctured fabric envelope shall not be used.

"After all the necessary excavations of the trench to the required depth have been made, and the trench leveled and smoothed as shown in the Plans, the fabric shall be loosely rolled out in such a manner that the center of the fabric is at the centerline of the excavated trench.

"The fabric should not be stretched so that it will tear when the aggregate is placed. When several sections of fabric are used, the fabric shall overlap a minimum of 2 feet to assure continuity of the filter. Sufficient fabric shall remain uncovered to provide for fabric overlap at the top.

“(c) Pipe. Prior to installing the pipe, a 4-inch layer of porous backfill meeting the requirements of Paragraph 2.15 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 2.15 is carefully 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.

“Following the backfilling operation, the trench fabric envelop shall be lapped over the top and covered with another specified material.

“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.”

“Underdrains using **non-perforated** corrugated polyethylene tubing shall be constructed as follows:

“(a) Trench. Trenches shall be excavated to the dimensions and grades required by the Plans or as directed by the Resident Engineer. In no case shall the width of trench exceed 12 inches. As bedding material is not needed, the trench depth shall be the pipe inverts shown on the Plans.

“(b) Pipe. After all the necessary excavations of the trench to the required depth have been made, and the trench leveled and smoothed as shown in the Plans, the non-perforated pipe shall be seated in the trench bottom and held firmly in place, while select excavated material 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.

“Non-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.”

705-3.4 MORTAR. Delete this section.

705-3.5 JOINTS IN CLAY OR CONCRETE PIPE. Delete this entire section.

705-3.6 BACKFILLING. Add the following:

“Backfilling for perforated underdrains shall be as detailed in the Plans.”

705-3.7 CONNECTIONS. Add the following:

“Connections to concrete pipe or manholes shown on the Plans shall be sealed with structural Portland cement concrete, as specified in Item 610.”

METHOD OF MEASUREMENT

Add:

705-4.3 The number of underdrain inspection holes and cleanouts shall be the number of units for each type of structure installed complete in place and accepted.

Add:

705-4.4 The number of existing underdrain cleanouts removed shall be the number of units removed and disposed of as specified.

BASIS OF PAYMENT

705-5.1 BASIS OF PAYMENT. Revise this section as follows:

“Payment will be made at the Contract unit price per linear foot for pipe underdrain of the type, class, and size designated. The fabric wrap on the pipe and the trench filter fabric envelope will not be measured separately for payment but shall be included in the unit price for underdrain pipe. Porous Material No. 2 shall be paid at the Contract unit price per cubic yard for Porous Backfill No. 2. Underdrain inspection hole and cleanout shall be paid at the Contract unit price per each type of structure installed and accepted by the Resident Engineer. Remove Underdrain Cleanout shall be paid at the Contract unit price for each existing structure removed and accepted by the Resident Engineer. These prices shall be full compensation for furnishing all materials and for all preparation, hauling, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

“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 Contractor Progress Payment report until such submittals have been furnished.

“Payment will be made under:

Item AR705412	Porous Backfill No. 2 - per cubic yard.
Item AR705506	6" Perforated Underdrain - per linear foot.
Item AR705630	Underdrain Inspection Hole - per each.
Item AR705640	Underdrain Cleanout - per each.
Item AR705904	Remove Underdrain Cleanout - per each.”

ITEM 751

MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES

Revise Item 751 of the Standard Specifications and Supplemental Specifications as follows:

DESCRIPTION

751-1.1 Add the following to the first paragraph:

“This item shall also meet IDOT Specifications and AASHTO M 199 (ASTM C-478) for pre-cast drainage structures.

“This item also includes the furnishing and installing of an oil/water separator sump manhole of the size and type as detailed and as located in the Plans.

“This item shall also include the removal of an existing manhole and disposal the removed structure off-site.

“This item shall also include the adjustment of existing manhole/catch basin frames and grates to the new finished elevation.”

MATERIALS

Add:

751-2.9 OIL/WATER SEPARATOR MANHOLE. The oil/water separator manhole shall be a precast modular underground structure designed for a 50,000 pound wheel load, Stormceptor® by CSRAmerica, Inc., Model Number 450i Precast Concrete Stormceptor (450 US Gallon Capacity), or equal, as detailed in the Plans.

❖ Stormceptor Corporation, 600 Jefferson Plaza, Suite 304, Rockville, Maryland 20852; 800.762.4703 or 301.762.8361, facsimile 301.762.4190; <http://www.stormceptor.com>.

The oil/water separator manhole shall be a 48-inch diameter precast concrete structure with fiberglass insert, bolted and sealed watertight, providing separate bypass chamber and treatment chamber providing dual wall containment of hydrocarbons. Concrete joints shall be oil resistant, watertight and meet ASTM C 443. The interceptor insert shall include a removable inlet down pipe with trash guard and tee handle, outlet riser pipe, and cleanout/vent pipe. Manhole frame shall of the specified type as shown on the Plans. Grate shall be lettered “Oil/Water Separator”.

CONSTRUCTION METHODS

Add:

751-3.11 OIL/WATER SEPARATOR MANHOLE. The oil/water separator manhole shall be installed in accordance with the manufacturer's specifications. The Contractor shall provide a crane for setting the structure and all incidentals necessary to provide a complete and operating unit. The cost for the crane and all other items necessary for the installation shall not be paid separately but shall be included in the Contract unit price for oil/water separator manhole.

Add:

751-3.12 PROVISIONS FOR TRENCH DRAIN AND UNDERDRAIN CONNECTIONS. Concrete manhole and inlet structures shall include pre-cast holes for use in making trench drain and/or underdrain pipe connections at those locations and at the inverts shown in the Plans and schedules. This pre-cast work shall be incidental to the manhole or inlet.

Add:

751-3.13 REMOVE MANHOLE. Existing manhole marked for removal shall be carefully removed to prevent damage to adjacent pipe. Existing bedding may be used to support installation of new culvert pipe to traverse the original manhole location. Backfill and restoration of the opening shall be in accordance with Item 701. Suitable material excavation for the new manhole to be installed near the removed manhole may be used for backfill. The removed structure shall be legally disposed of off-site by the Contractor. Backfill, restoration and disposal costs shall not be measured separately for payment but shall be incidental to the Contract unit price for manhole removal.

Add:

751-3.14 ADJUST MANHOLE. The existing frame and grate for each manhole identified for adjustment shall be to adjusted to meet the new final grade. Adjustments shall be made by adding to or removing the appropriate number or size of adjusting rings. The adjusted frame shall be resealed in accordance with Item 751. Adjusting rings, mortar and other materials used in manhole adjustment shall not be measured for payment but shall be incidental to the Contract unit price for manhole adjustment.

METHOD OF MEASUREMENT

751-4.1 Add the following:

The number of Oil/Water Separator Manholes shall be counted and measured by the unit.

"The number of manholes removed shall be the number of existing structures removed, disposed of and accepted in accordance with this Item and shall be counted and measured as one unit.

"The number of manholes adjusted shall be the number of existing frame and grate units adjusted to the new elevation and accepted in accordance with this Item and shall be counted and measured as one unit."

BASIS OF PAYMENT

751-5.1 Add the following:

“The number of accepted Oil/Water Separator Sump Manholes shall be paid at the Contract unit price per each, completed and accepted as a unit. The accepted number of manholes removed shall be paid at the Contract unit price per each, complete and accepted. The number of accepted manholes adjusted shall be paid at the Contract unit price per each, complete and accepted. These prices shall be full compensation for furnishing all materials and all preparation, excavation, backfilling, placing and adjusting of the materials; furnishing and installation of such specials and connections to pipes and other structures as may be required to complete the item as shown in the Plans, and; for all labor, equipment, tools and incidentals necessary to complete the item.

“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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.”

Delete the pay item listing and replace with the following:

“Payment will be made under:

“Item AR751411	Inlet - Type A - per each.
Item AR751540	Manhole 4' - per each.
Item AR751550	Manhole 5' - per each.
Item AR751560	Manhole 6' - per each.
Item AR751567	Manhole 7' - per each.
Item AR751903	Remove Manhole - per each.
Item AR751943	Adjust Manhole - per each
Item AR800928	Oil/Water Separator Manhole - per each.”

ITEM 752

CONCRETE CULVERTS, HEADWALLS AND MISCELLANEOUS DRAINAGE STRUCTURES

Revise Item 752 of the Standard Specifications and Supplemental Specifications as follows:

DESCRIPTION

752-1.1 Add the following:

"The precast flared end section shall meet the requirements of IDOT Specifications.

"This item shall also include the remove of existing flared end sections and gratings at the locations shown in the Plans.

"This item shall also consist of the grating for concrete flared end sections at the dimensions shown in the Plans. **The Contractor shall coordinate the grating dimensions shown in the Plans with the manufacture of the pre-cast flared end section.**"

MATERIALS

Add:

752-2.2 GRATING FOR CONCRETE FLARED END SECTION. Grating dimensions shall be as shown in the Plans. Structural steel shall conform to Section 1006.04 of the IDOT Specifications. Galvanized steel pipe shall conform to Section 1006.27 (b) of the IDOT Specifications. Nuts, bolts and washers shall be in accordance with Section 1006.27 (f) of the IDOT Specifications. All fabrication shall be completed prior to galvanizing. **The Contractor shall coordinate the grating dimensions shown in the Plans with the manufacture of the pre-cast flared end section.**"

Add:

752-2.3 REMOVE END SECTION. Existing end section marked for removal shall be carefully removed to prevent damage to adjacent pipe. The grating may be removed separately to facilitate the end section's removal; however, the end section and grating will be measured as one unit for payment. The removed end section and grating shall be legally disposed of off-site by the Contractor. Backfill, restoration and disposal costs shall not be measured separately for payment but shall be incidental to the Contract unit price for end section removal.

METHOD OF MEASUREMENT

752-4.1 METHOD OF MEASUREMENT. Add the following:

"The quantities of grating for concrete flared end sections measured for payment shall be the actual number of gratings installed by the Contractor and accepted by the Resident Engineer.

"The quantities of flared end sections removed shall be the number removed as one section-grating unit, disposed of off-site at a legal disposal site and accepted by the Resident Engineer.

BASIS OF PAYMENT

752-5.1 BASIS OF PAYMENT. Revise this section to read as follows:

"The accepted number of concrete flared end sections will be paid for at the Contract unit price per each, complete and in place. The accepted number of gratings for concrete flared end sections will be paid for at the Contract unit price per each, complete and in place. The number of end sections removed will be paid for at the Contract unit price, completed and accepted. These prices shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling and placing of the materials; furnishing and installation of such specials and connections to pipes and other structures as may be required to complete the item as shown in the Plans, and disposal off-site of removed items; and for all labor, equipment, tools and incidentals necessary to complete the structure.

"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 Contractor Progress Payment report until such submittals have been furnished.

"Payment will be made under:

"Item AR752412	Precast Reinforced Conc. FES 12" - per each.
Item AR752421	Precast Reinforced Conc. FES 21" - per each.
Item AR752430	Precast Reinforced Conc. FES 30" - per each.
Item AR752512	Grating for Conc. FES 12" -per each.
Item AR752521	Grating for Conc. FES 21" -per each.
Item AR752530	Grating for Conc. FES 30" -per each.
Item AR752730	P. R. Conc. FES Eq. Round Size 30" -per each.
Item AR752900	Remove End Section - per each.
Item AR800992	Grating for Conc. FES Eq. Rd. Size 30" - per each."

ITEM 754

CONCRETE GUTTERS, DITCHES AND FLUMES

This item shall be provided in accordance with the Standard Specifications and Supplemental Specification for Item 754 Concrete Gutters, Ditches and Flumes.

Payment will be made under:

Item AR754410 Comb Concrete Curb and Gutter - per linear foot.

ITEM 800914

HIGH-MAST APRON AREA LIGHTING

GENERAL

800914-1.1 This item shall consist of furnishing and installing all high-mast apron area light fixtures, fixture support ring assemblies, lightning rods, winch and cable assemblies, light poles, light pole foundations of the depths and diameters shown on the Plans and specified herein, anchor bolts, fixture brackets, internal fusing, ballasts, lamps, lightening arresters, duplex ground receptacles, and ground rods. The item also includes one (1) external (portable) hoist motor with associated motor step-down transformer and removable support and low voltage control equipment. Installation shall include testing of the light fixtures and aiming of the fixtures to obtain the light levels specified herein. Light pole locations are indicated on the Plans and no deviation from these locations shall be permitted without the written approval of the Project Engineer.

All steel used in the construction of this item shall be domestically produced and the Contractor shall provide the Resident Engineer a statement certifying to this fact.

800914-1.2 COMPUTER ANALYSIS. A scaled computer analysis showing expected light levels on the apron shall be provided with the luminaries shop drawings. The input sheet shall also be provided, showing all fixture locations, mounting heights, aiming directions and tilts. Tilts in excess of 20 degrees shall not be allowed. A computer disk with photo-metrics in I.E.S. format shall also be submitted.

800914-1.3 APPLICABLE STANDARDS FOR FOUNDATIONS. Light pole foundation construction shall conform to the requirements of all codes, regulations, ordinances or laws as may apply thereto. The Contractor is required to be familiar with and comply with all OSHA, EPA, and other federal, state and local requirements which pertain to this Work. All tests, materials or additional work called for by said requirements shall not be paid separately but shall be included in the Contract unit price for apron area lighting.

MATERIALS

800914-2.1 FIXTURES. The fixtures shall be 1,000 Watt, 208 Volt, high pressure sodium, forward throw distribution (Type F), knuckle mounting, with dark bronze powder coated finish, Model Number APL-22-F-1000-HPS-DB-208-K, by Quality Lighting, or equal. The Contractor shall verify the finish color with the Project Engineer before ordering.

Fixture housings shall be formed from heavy gauge aluminum and internally welded. All external hardware shall be stainless steel. The unit shall be U.L. listed for wet locations. Dimensions of the fixtures shall be as shown on the Plans. An extruded, mitered clear anodized aluminum lens frame shall be welded into one piece and permanently fastened to the housing with a full-length hinge. The lens shall be made of flat, thermal and shock resistant glass sealed with silicone in a "U" channel lens frame. The lens frame shall be gasketed to the housing's internal reinforcement ring with silicone-impregnated Dacron[®] gasketing.

SPECIAL PROVISIONS**CHICAGO-ROMEDEVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-3441**

The fixtures shall have a Type F reflector system. The reflector shall have a sharp cutoff at 70 degrees with maximum candlepower at 65 degrees. Fixtures shall operate at 208 Volt AC and be suitable for use with 1,000 Watt high pressure sodium lamps.

The fixture shall have a polyester powder coat, electrostatically applied, which is preceded by a five-step pre-treatment process including an iron phosphate priming stage for superior coating adhesion. The finish shall meet or exceed all ASTM requirements for 1,000 hour salt spray exposure.

The fixture shall be mounted on the pole using a "K-swivel" knuckle for mounting on a luminaire support ring with a 2-³/₈ inch O.D. tenon. The swivel knuckle's cast aluminum adjustable knuckle shall be serrated for positive locking in position.

It shall be the responsibility of the Contractor to aim the fixtures at night as directed by the Resident Engineer.

The Contractor and his lighting equipment supplier shall provide any shielding of fixtures required to prevent glare from direct or reflected light in the field of vision of pilots or air traffic control personnel.

800914-2.2 LAMPS. All lamps shall be 1,000W high pressure sodium. One spare lamp shall be provided for each fixture. Lamps shall be installed by the Contractor just prior to testing of the system to reduce the possibility of breakage. Broken lamps shall be replaced by the Contractor to no cost to the Contract.

800914-2.3 BALLASTS. Units shall have CWA-type ballasts capable of starting the lamps specified at a temperature of -20° F. They shall be tray mounted and supplied with quick-disconnects.

800914-2.4 HIGH-MAST SYSTEM. The high-mast system shall consist of a steel pole with anchor bolt-style base connection and lowering device assembly with fixture attachment. A single manufacturer shall warrant the pole structure, fixtures and lowering device.

The 90 foot systems shall be top latch, ring for three fixtures and elbows with counterweights, 4-conductor #8 AWG power cord for 208 Volt, stainless steel hoist cables, hoist for portable motor, pre-wired head frame, and 36-inch lightning rod, Model Number 5410-LD-90-3A-TL-SS-4C8-B2-HEM-PW-LR, by Metrolux Roadway Lighting Solutions, or equal. Whitco Pole Model Number HLT-90-W5-AB- + GPDB-METROLUX-EX-3-SP-LP, or approved equal. Contractor shall verify model numbers with the respective pole manufacturer and confirm that the pole and lowering device are compatible with each other.

The pole systems shall be finish painted with a fused powder coating over a galvanized treatment. The color shall be dark bronze to match the fixtures and other attachments. The Contractor shall verify the finish color and pole size with the Resident Engineer before ordering.

The Contractor shall submit shop drawings on all parts of the poles including the poles, head frame assembly, luminaire ring assembly, ring cables, electric power cord support, hoist winch and support assembly, handholes, junction boxes, breakers, power plugs, receptacles, mounting methods, colors, finishing procedures and written warranties.

The high-mast system shall meet the following:

- (a) Structural Design Information. The high-mast pole structure shall be designed by the manufacturer for the combined effective projected area (EPA) and weight of the fixtures and head-frame assembly. Designs shall incorporate a minimum loading capacity of 20.0 total EPA and 950 pounds of weight. The pole shall be analyzed by the manufacturer in its final deflected position to account for secondary moments caused by eccentric dead loads. Pole calculations shall be submitted by the manufacturer to the Project Engineer prior to manufacture. The pole calculations shall include a pole, base plate and anchor bolt analysis. The pole calculations shall be analyzed at the pole base, at five-foot intervals along the pole and at each slip joint splice. At these locations, the following information shall be provided:
1. The pole shafts diameter, thickness, section modulus, moment of inertia, and cross sectional area.
 2. The centroid, weight, projected area, drag coefficient, velocity pressure, and wind force of each trapezoidal pole segment.
 3. The structures axial force, shear force, primary moment, total moment, axial stress, bending stress, allowable axial stress, allowable bending stress, and combined stress ratio (CSR) at each elevation.
 4. The pole's angular and linear deflection at each elevation.

Calculations shall include an inherent summary page of applicable information pertaining to the design of concrete foundations. The summary page shall include, at a minimum, the total base moment, axial force, shear force, anchor bolt size and quantity, base plate size, and minimum and maximum bolt projections above the footing.

Each individual calculation shall include the project name, date and manufacturing company information.

- (b) Wind Speed and Design Criteria. Wind velocities of 100 miles per hour, with a applicable gust factor of 1.3 shall be used in the pole design. The structure shall be designed in accordance with local building codes. The fabrication plans and design calculations shall be certified (sealed) by a structural engineer registered in the State of Illinois.
- (c) Handhole and Winch Plate. Each pole shall be furnished with a reinforced handhole and winch plate as shown on the Plans. The handhole shall be a frame style and measure a minimum 10-inches wide and 30-inches high. The handhole door shall be permanently hinged and incorporate a lockable latch. Each pole shall be furnished with one padlock, Model Number 21B-1 ½ inch bronze shackle, by Best Access Systems, with core keyed to the Owner's masterkey system.

A winch plate shall be furnished on the interior of the pole opposite the handhole frame to accept the lowering device assembly, as shown in the Plans.

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- (d) Pole Shaft. Each section of the pole shaft shall be of single ply material and made from a single sheet of steel with no circumferential welded splices. The bottom section shall have a minimum base diameter of 17.0-inches. The top diameter of the single section for the 50-foot pole shall be no smaller than 10.0-inches. The top diameter of the assembled structure for the 90-foot shall be no smaller than 4.77 inches.

The pole shaft cross-section for the top and bottom sections shall be round. Multi-sided cross-sections shall not be permitted. The pole shaft sections shall be high-strength steel meeting the requirements of ASTM A572 (65 Ksi Yield) and/or ASTM A595 (55Ksi Yield). The base section shall be manufactured from minimum 0.1875-inch thick material. Top sections shall also be manufactured from minimum 0.1875-inch thick material.

Each slip joint shall be assembled in the field by telescoping the upper section over the lower section by a minimum lap of 1.5 times the largest inside diameter of the upper "female" section. Ground lugs for bonding damper wire mesh shall be furnished at the joint, as shown on the Plans.

- (e) Base Plate. Base plates shall conform to ASTM A36 or ASTM A42. Plates shall be integrally-welded to the bottom pole section with either a telescopic welded joint or back-up bar joint configuration. If telescoped, both external and internal lap joints shall be welded complete.

The Contractor shall also install rodent screening, as shown on the Plans, at the base.

- (f) Anchor Bolts. Foundations will be poured concrete footings with incorporation of an anchor bolt to base plate attachment system. The anchor bolt material shall be:
1. Material for anchor bolts shall be ASTM F1554, Grade 55, or equal. The bolts shall have a minimum of 10-inch thread and be galvanized to ASTM A153 for a minimum of 12-inches on the threaded end. Each anchor bolt shall be supplied with two hex nuts and two flat washers. The strength of the nuts shall be equal to or exceed the proof load of the bolts. Anchor bolts shall be furnished with a "hooked" end on the embedded portion of the bolt.
 2. The pole manufacturer shall provide steel anchor bolt setting templates, one per pole/foundation. Anchor bolts and templates must be readily available for pre-shipment.

- (g) Galvanizing and Finish Painting. Each pole assembly shall be finish painted over galvanized treatment.

Pole shaft sections shall be hot dip galvanized in accordance with ASTM A123. Each shaft assembly shall be completely coated, inside and out, in a single dip. Double dipping shall not be permitted. All connecting hardware shall be galvanized in accordance with ASTM A153.

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After galvanizing, the pole shaft and hardware shall be finish painted with a fused powder coating. Prior to painting, the galvanized treatment shall be brush blasted to remove oxidation and to heighten the surface profile for better paint adhesion. The pole shall then be heated in an oven to provide for the release of gases in the galvanization that may impeded paint adhesion. All exterior metal surfaces shall then be degreased with a high-pressure power washer using an alkaline detergent. The surfaces shall then be blasted with a combination of shot and grit to remove dirt, mill scale, rust corrosion, oxides and other foreign matter. All blasted surfaces shall receive a chemical pretreatment with an iron phosphate conversion coating applied by a high-pressure power washer. The pre-treated surfaces shall then receive a fresh water rinse containing special surfactant and then forced dried. The powder coating shall then be electrostatically applied and baked (8 mils thick). The finish shall carry a five-year warranty.

The color shall be dark bronze to match the fixtures and other attachments. The Contractor shall verify the finish color with the Resident Engineer before ordering.

- (h) Welding. Welding shall be in accordance with AWS (American Welding Society) Structural Welding Code, current edition. Welders certified in accordance with the AWS code shall perform all welding. Welds shall be free of cracks and under-cutting, and shall be 100 percent visually inspected, with questionable areas inspected by magnetic particle non-destructive process.
- (i) Lowering Device Assembly. The lowering device assembly for each pole shall be of the top-latching type, with a standard head frame assembly, luminaire ring assembly (with fiberglass NEMA Type 4 weathertight junction box), transition assembly, top cover, electrical power cord, and standard hoist (HEM), for a complete and fully operating system. Each assembly shall be furnished with a lightning rod, as shown in the Plans.

Except stainless steel material, all exposed metal portions of the assembly, including the ring-mounted junction box, shall be electrostatically painted dark bronze to match the pole and fixtures. The clear acrylic top dome shall not be painted.

One portable power unit, incorporating the drive motor, torque limiter, drive shaft and electrical controls, as shown in the Plans, shall be provided under the Contract. The cost of the portable power unit, complete, shall not be paid for separately but shall be included in the unit price for the high-mast pole system.

800914-2.5 INTERNAL WIRING. All power plugs, receptacles and circuit breakers shall be accessible through the pole handhole, and provided as shown in the Plans. The Contractor shall provide waterproof connections, splices, breakers, fuses, and any other miscellaneous items necessary for a complete installation, including the connection of the fixtures. All fusing and connections shall be within the handhole or in weathertight enclosures.

800914-2.6 LIGHTENING ARRESTERS. Each pole shall be furnished with a 208 VAC lightning arrester. The arrester shall have 3200V impulse sparkover and shall have a minimum of 10,000A discharge current. Lightning arresters shall be manufactured by Square D or equal. Lightning arresters shall be installed in the pole handholes. Cost of the arresters shall be incidental to the pole assembly.

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

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800914-2.7 GROUND RODS. All light poles shall be furnished with a ground rods as detailed in the Plans. The ground rods shall be $\frac{3}{4}$ -inch diameter, 10-foot long, copper clad. The top of the rods shall be buried at least 12-inches below finished grade. All connections to the ground rods shall be one-shot exothermic welding, as manufactured by Cadweld, or equal. Cost of the ground rod shall be incidental to the light pole.

800914-2.8 LIGHT POLE FOUNDATIONS. Light pole foundations shall be furnished as shown in the Plans. Concrete for the foundations shall meet materials and quality requirements of Item 610, providing a 14-day compressive strength of 3,500 psi. Pole erection shall not be permitted until the foundation concrete has meet the required strength.

Reinforcement for concrete shall be as shown in the Plans, and shall conform to Item 610, Section 610-2.9, of the Standard Specifications.

CONSTRUCTION METHODS

800914-3.1 LIGHT POLE FOUNDATION. Light pole foundations shall be of the types, diameters and lengths shown on the Plans. Except as shown or specified elsewhere, the means and methods of construction shall be at the discretion of the Contractor. Should a boulder be encountered during excavation, its removal, as necessary for completion of the foundation, shall be paid for as extra work.

All drilled and excavated materials shall be disposed of off site or in a suitable location as directed by the Resident Engineer. All water that may be within the excavation, and any loose material or foreign substances in or which may fall in the excavation shall be removed before concrete work begins. No concrete work may begin until all inspections and tests have been completed and the Resident Engineer has approved the Work for concrete placement.

The center of any light pole foundation, measured at any horizontal plane, will be allowed a tolerance from true plumb of not more than 1 percent of the depth of such plane. Plumb lines shall be suspended from center points at the top of the shaft, and any divergence above the allowable tolerance shall be corrected.

The top portion of the foundation which projects above grade, and the portion below grade for a depth of 18-inches, shall be **formed** to the diameter shown on the Plans. Concrete shall be placed in the forms at the same time that the remaining lower portion of the foundation is filled with concrete.

The remaining portion of the foundation shaft shall be cased, **as necessary**, to overcome unsuitable soil conditions and prevent the entry of water. The Work shall be performed in a manner that will confine disturbance of surrounding materials to a minimum. The light pole foundations shall receive full lateral support from the surrounding materials. The provision of casing or linings for foundations, **as necessary**, shall not be considered separately for payment but shall be incidental to the light pole foundation. Casings or linings shall be withdrawn as explained below.

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Protective casings used to prevent cave-in and entry of groundwater shall be withdrawn only as the shaft is filled with concrete. A head of concrete sufficient to counterbalance outside soil and water pressure must be maintained above the bottom of casing as the casing is withdrawn. The casing shall be removed from the shaft as concrete is placed. The bottom of the casing shall be maintained not more than 5 feet nor less than 1 feet below the top of the concrete during withdrawal and placing operations. The inside of the casing must be free of dried concrete and soil, and vibration of the concrete will not be allowed until after the casing is pulled. These precautions should minimize the adhesion of concrete to the casing sides and should prevent concrete arching during withdrawal of the casing.

Concrete shall be mixed, placed and cured in accordance with Item 610. The concrete shall be placed in a manner that will prevent the separation of its constituent materials. Drop chutes or tremies shall be used to prevent concrete from striking walls. Concrete shall be poured continuously from bottom to top of the light pole foundation. The intent of this specification is to provide concrete that, after being deposited, shall form a solid homogeneous mass from voids and an excessive amount of water.

800914-3.2 POLES AND FIXTURES. Poles, fixtures and accessories shall be assembled and wired on the ground, then lifted and bolted in place, plumb. The pole and assembly shall be considered plumb when the center of the pole is directly over the center of the pole base. Plumb is to be measured with a transit. Poles and fixtures shall be set on their foundations such that the fixtures aim in the direction indicated on the Plans and as directed by the Resident Engineer.

Wiring run from fixtures to the power connections shall have a strain relief clamp provided at the entry to the fixture to prevent wires from pulling loose from their terminals at the fixture.

Internal wiring of fixtures, receptacles, fuses, breakers and waterproof splices shall be incidental to this item.

800914-3.3 RESTORATION. All areas disturbed by the light pole and foundation installation shall be restored to its original condition. The restoration shall include any topsoiling, fertilizing, seeding and mulching, or sodding, and shall be performed in accordance with these Special Provisions and Standard Specifications. Payment for restoration at the light installation locations, when outside the Plan limits of seeding or sodding, shall not be paid for separately, but shall be incidental to this item.

800914-3.4 TESTING. The Contractor shall test all light fixtures using a portable power source prior to acceptance of this Work. All fixtures shall be operational and aimed, adjusted and shielded to the satisfaction of the Resident Engineer. Items not satisfactory will be replaced and retested at Contractor's expense.

METHOD OF MEASUREMENT

800914-4.1 METHOD OF MEASUREMENT. For new 90-Foot High-mast System with 3 Fixtures, the pole foundation, pole, handhole, winch plate, head frame assembly, luminaire ring assembly, ring cables, electric power cord support, hoist winch and support assembly, junction box, breakers, power plugs, receptacles, three fixtures, and incidentals will be measured as one unit as actually installed and accepted and as tested in accordance with Section 800914-3.4 above.

One portable power unit shall be provided by the Contractor, incorporating the drive motor, torque limiter, drive shaft and electrical controls. The portable power unit shall not be measured separately but shall be included in the unit price for the high-mast pole system.

Casing or lining for the pole foundations, **as necessary**, is considered incidental to this item and no other compensation will be allowed.

Testing is also considered incidental to all electrical items installed and no other compensation will be allowed.

BASIS OF PAYMENT

800914-5.1 BASIS OF PAYMENT. Payment will be made at the Contract unit price for each High-mast System with 3 Fixtures as measured in Article 800914-4.1. The price per each unit shall be full compensation for furnishing all labor, materials, tools, equipment, testing and incidentals necessary to complete the item as specified.

Payment will be made under:

Item AR800914 90-Foot High-mast System w/ 3 Fixt. - per each.

ITEM 800925

CA-3 AGGREGATE BACKFILL

GENERAL

800925-1.1 This item shall consist of furnishing, placing, shaping and compacting crushed stone (CA-3) for use in soil stabilization for the existing subgrade. The material is to be placed to the lines and grades as shown in the Plans and as directed by the Resident Engineer.

MATERIALS

800925-2.1 COARSE AGGREGATE. The crushed coarse aggregate shall conform with the requirements of Article 1004.01 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2002, and the following specific requirements:

- (a) Description. The coarse aggregate shall be pit run gravel, gravel, crushed gravel, novaculite, crushed stone, crushed concrete or crushed sandstone.

The granular material, if approved by the Engineer, may be produced by blending aggregates from more than one source, provided the method of blending results in a uniform product. The components of a blend may not be of the same kind of material. The source of material shall not be changed during the progress of the Work without written permission of the Engineer. Where a natural aggregate is deficient in fines, the material added to make up deficiencies shall be a material approved by the Engineer.

- (b) Quality. The coarse aggregate shall be Class D Quality or better.

- (c) Gradation. The coarse aggregate gradation (Type B) shall be CA-3.

- (d) Plasticity. All material shall have a plasticity ratio of 0 to 9 percent. The plasticity index requirement for crushed gravel and crushed stone may be waived if the ratio of the percent passing the No. 200 sieve to that passing the No. 40 sieve is 0.60 or less.

The plasticity index shall be determined by the method given in AASHTO T90. Where shale in any form exists in the producing ledges, crushed stone samples shall be soaked a minimum of eighteen hours before processing for plasticity index or minus No. 40 material. When clay material is added to adjust the plasticity index, the clay material shall be in a minus No. 4 sieve size.

CONSTRUCTION METHODS

800925-3.1 GENERAL. All work involved in clearing and stripping of quarries and pits, including the handling of unsuitable material, shall be performed by the Contractor at his own expense. The aggregate material shall be obtained from approved sources. The material shall be handled in a manner that shall secure a uniform and satisfactory product.

SPECIAL PROVISIONS**CHICAGO-ROMEORVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-3441**

800925-3.2 EQUIPMENT. All equipment necessary for the proper construction of this Work shall be on the Project, in first-class working condition, and approved by the Resident Engineer before construction is permitted to start. Equipment available shall meet the requirements of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2002, Article 206.03, of Section 206, Granular Embankment, Special.

800925-3.3 PREPARING UNDERLYING COURSE. The underlying subgrade shall be checked and accepted by the Resident Engineer before placing and spreading operations are started. The subgrade shall be free of ruts, objects and debris. The coarse aggregate is to be placed over a separation fabric as specified in Item 156513. The furnishing and placement of the separation fabric will be paid under Item ARI 56510. The coarse aggregate is to be placed over the accepted fabric. Aggregate will be spread over the area in a manner that is not injurious to the fabric. To protect the underlying course and to insure proper drainage, the spreading of the aggregate shall begin along the centerline of the area for a crowned section or on the high side of the pavement with a one-way slope.

800925-3.4 PLACING AND SPREADING. The depositing and spreading of the material shall commence where designated and shall progress without breaks. The material shall be deposited and spread in lanes in a uniform layer and without segregation of size to such loose depth that, when compacted, the layer shall have the required thickness. The aggregate shall be spread by spreader boxes or other approved devices or methods that shall spread the aggregate in the required amount to avoid or minimize the need for re-handling the material and to prevent the rutting of the underlying subgrade. Hauling over the un-compacted material shall not be permitted.

The coarse aggregate material shall be placed on the underlying subgrade in loose lifts of up to 10-inches. The aggregate, as spread, shall be of uniform gradation with no segregation or pockets of fine or coarse materials. No material shall be placed in snow or on a soft, muddy, or frozen underlying course. When more than one layer is required, the construction procedure described herein shall apply similarly to each layer.

The Resident Engineer shall make tests to determine the relative and maximum density and the proper moisture content of the material, and this information will be available to the Contractor. The material shall have a satisfactory moisture content when rolling is started, and any minor variations prior to or during rolling shall be corrected by sprinkling or aeration, if necessary.

During the placing and spreading, sufficient caution shall be exercised to prevent the incorporation of subgrade or shoulder material in the aggregate mixture.

800925-3.5 FINISHING AND COMPACTING. After spreading, the aggregate shall be thoroughly compacted by rolling. The rolling shall progress gradually from the sides to the center of the lane under construction, or from one side toward previously placed material by lapping uniformly each preceding rear wheel track by one-half the width of such track. Rolling shall continue until the stone is thoroughly set, the interstices of the material reduced to a minimum, and creeping of the stone ahead of the roller is no longer visible. Rolling shall continue until the material has been compacted to not less than 75 percent relative density (equivalent to 100% maximum density when tested in accordance with ASTM D-698). Blading and rolling shall be done alternately, as required or directed, to obtain smooth, even and uniformly compacted backfill.

SPECIAL PROVISIONS

CHICAGO-ROMEORVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-3441

The course shall not be rolled when the underlying course is soft or yielding or when the rolling causes undulation in the aggregate course.

In areas inaccessible to rollers, the material shall be tamped thoroughly with mechanical tampers.

The sprinkling during rolling, if necessary, shall be in the amount and by equipment approved by the Resident Engineer.

800925-3.6 PROTECTION. Work on the backfill shall not be accomplished during freezing temperatures nor when the subgrade is wet. When the aggregates contain frozen materials or when the underlying course is frozen, the construction shall be stopped.

Hauling equipment may be routed over completed portions of the backfill provided no damage results and provided that such equipment is routed over the full width of the course to avoid rutting or uneven compaction. However the Resident Engineer shall have the full and specific authority to stop all hauling over completed or partially completed backfill when, in his opinion, such hauling is causing damage. Any damage resulting from routing equipment over the course shall be repaired by the Contractor at his own expense.

800925-3.7 MAINTENANCE. The backfill shall be properly drained at all times. If cleaning is necessary, any work or restitution necessary shall be at the expense of the Contractor.

METHOD OF MEASUREMENT

800925-4.1 The CA-3 Aggregate Backfill to be paid for shall be measured in place and the volume computed in cubic yards for material placed and accepted, and shall be determined from the dimensions given in the Plans or dimensions ordered by the Resident Engineer.

BASIS OF PAYMENT

800925-5.1 Payment will be made at the Contract unit price per cubic yard for CA-3 Aggregate Backfill. This price shall be full compensation for furnishing all materials and for the preparation, hauling, and placing of these materials, and for all labor, equipment, tools and incidentals necessary to complete the item.

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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

Payment will be made under:

Item AR800925 CA-3 Aggregate Backfill - per cubic yard.

ITEM 800926

CA-6 AGGREGATE BACKFILL

GENERAL

800926-1.1 This item shall consist of furnishing, placing, shaping and compacting crushed stone (CA-6) for use as an aggregate backfill in soil stabilization for the existing subgrade. The material is to be placed to the lines and grades as shown on the Plans and as directed by the Resident Engineer.

MATERIALS

800926-2.1 COARSE AGGREGATE. The crushed coarse aggregate shall conform with the requirements of Article 1004.01 of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2002, and the following specific requirements:

- (a) Description. The coarse aggregate shall be pit run gravel, gravel, crushed gravel, novaculite, crushed stone, crushed concrete, crushed slag or crushed sandstone.

The granular material, if approved by the Engineer, may be produced by blending aggregates from more than one source, provided the method of blending results in a uniform product. The components of a blend may not be of the same kind of material. The source of material shall not be changed during the progress of the Work without written permission of the Engineer. Where a natural aggregate is deficient in fines, the material added to make up deficiencies shall be a material approved by the Engineer.

- (b) Quality. The coarse aggregate shall be Class D Quality or better.

- (c) Gradation. The coarse aggregate gradation (Type B) shall be CA-6.

- (d) Plasticity. Gravel material shall have a plasticity index of 0 to 6 percent; crushed gravel, stone and slag material shall have a plasticity index of 0 to 4. The plasticity index requirement for crushed gravel and crushed stone may be waived if the ratio of the percent passing the No. 200 sieve to that passing the No. 40 sieve is 0.60 or less.

The plasticity index shall be determined by the method given in AASHTO T90. Where shale in any form exists in the producing ledges, crushed stone samples shall be soaked a minimum of eighteen hours before processing for plasticity index or minus No. 40 material. When clay material is added to adjust the plasticity index, the clay material shall be in a minus No. 4 sieve size.

CONSTRUCTION METHODS

800926-3.1 GENERAL. All work involved in clearing and stripping of quarries and pits, including the handling of unsuitable material, shall be performed by the Contractor at his own expense. The aggregate material shall be obtained from approved sources. The material shall be handled in a manner that shall secure a uniform and satisfactory product.

SPECIAL PROVISIONS**CHICAGO-ROMEDEVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-344I**

800926-3.2 EQUIPMENT. All equipment necessary for the proper construction of this Work shall be on the Project, in first-class working condition, and approved by the Resident Engineer before construction is permitted to start. Equipment available shall meet the requirements of IDOT Standard Specifications for Road and Bridge Construction, adopted January 1, 2002, Article 206.03, of Section 206, Granular Embankment, Special.

800926-3.3 PREPARING UNDERLYING COURSE. The underlying material shall be checked and accepted by the Resident Engineer before placing and spreading operations are started. The coarse aggregate is to be placed over a stabilization structural geogrid as specified in Item I 52540. The furnishing and placement of the geogrid will be paid under Item AR I 52540. Aggregate will be spread over the fabric in a manner that is not injurious to the fabric. To protect the underlying course and to insure proper drainage, the spreading of the aggregate shall begin along the centerline of the area for a crowned section or on the high side of the pavement with a one-way slope.

800926-3.4 PLACING AND SPREADING. The depositing and spreading of the material shall commence where designated and shall progress without breaks. The material shall be deposited and spread in lanes in a uniform layer and without segregation of size to such loose depth that, when compacted, the layer shall have the required thickness. The aggregate shall be spread by spreader boxes or other approved devices or methods that shall spread the aggregate in the required amount to avoid or minimize the need for re-handling the material and to prevent the rutting of the underlying subgrade. Hauling over the un-compacted material shall not be permitted.

The coarse aggregate material shall be placed on the underlying subgrade and stabilization fabric in loose lifts of up to 6-inches. The aggregate, as spread, shall be of uniform gradation with no segregation or pockets of fine or coarse materials. No material shall be placed in snow or on a soft, muddy, or frozen underlying course. When more than one layer is required, the construction procedure described herein shall apply similarly to each layer.

During the placing and spreading, sufficient caution shall be exercised to prevent the incorporation of subgrade or shoulder material in the aggregate mixture.

800926-3.5 FINISHING AND COMPACTING. After spreading, the aggregate shall be thoroughly compacted by rolling. The rolling shall progress gradually from the sides to the center of the lane under construction, or from one side toward previously placed material by lapping uniformly each preceding rear wheel track by one-half the width of such track. Rolling shall continue until the stone is thoroughly set, the interstices of the material reduced to a minimum, and creeping of the stone ahead of the roller is no longer visible. Rolling shall continue until the material has been compacted to not less than 95 percent of maximum density when tested in accordance with ASTM D-698 (Standard Proctor). Blading and rolling shall be done alternately, as required or directed, to obtain smooth, even and uniformly compacted backfill.

The course shall not be rolled when the underlying course is soft or yielding or when the rolling causes undulation in the aggregate course.

In areas inaccessible to rollers, the material shall be tamped thoroughly with mechanical tampers.

The sprinkling during rolling, if necessary, shall be in the amount and by equipment approved by the Resident Engineer.

800926-3.6 PROTECTION. Work on the backfill shall not be accomplished during freezing temperatures nor when the subgrade is wet. When the aggregates contain frozen materials or when the underlying course is frozen, the construction shall be stopped.

Hauling equipment may be routed over completed portions of the backfill provided no damage results and provided that such equipment is routed over the full width of the course to avoid rutting or uneven compaction. However the Resident Engineer shall have the full and specific authority to stop all hauling over completed or partially completed backfill when, in his opinion, such hauling is causing damage. Any damage resulting from routing equipment over the course shall be repaired by the Contractor at his own expense.

800926-3.7 MAINTENANCE. The backfill shall be properly drained at all times. If cleaning is necessary, any work or restitution necessary shall be at the expense of the Contractor.

METHOD OF MEASUREMENT

800926-4.1 The CA-6 Aggregate Backfill to be paid for shall be measured in place and the volume computed in cubic yards for material placed and accepted, and shall be determined from the dimensions given on the Plans or dimensions ordered by the Resident Engineer.

BASIS OF PAYMENT

800926-5.1 Payment will be made at the Contract unit price per cubic yard for CA-6 Aggregate Backfill. This price shall be full compensation for furnishing all materials and for the preparation, hauling, and placing of these materials, and for all labor, equipment, tools and incidentals necessary to complete the item.

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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished.

Payment will be made under:

Item AR800926 CA-6 Aggregate Backfill - per cubic yard.

SPECIAL PROVISIONS

CHICAGO-ROMEovILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-344I

ITEM 80099I

PCC UTILITY TRENCH

GENERAL

80099I-1.1 This item shall consist of furnishing and constructing a utility trench at the location shown and in accordance with the details shown in the Plans, and as directed by the Resident Engineer.

MATERIALS

80099I-2.1 AGGREGATE BASE. An aggregate base material shall be used along the base of the trench for ease in construction, meeting the requirements for IDOT CA-6.

80099I-2.2 CONCRETE. Concrete shall meet the requirements of Item 610.

80099I-2.3 STEEL. Reinforcing steel shall be as detailed in the Plans. All steel used in the construction of this item shall be domestically produced and the Contractor shall provide the Resident Engineer a statement certifying to this fact.

80099I-2.4 FRAME AND SOLID LID. The frame and lid for the trench shall be Neenah Foundry Company, Series R-4999-HX Type D, Heavy Duty, Bolted Transverse frame with solid lid, or approved equal. All steel used in the construction of this item shall be domestically produced and the Contractor shall provide the Resident Engineer a statement certifying to this fact.

80099I-2.5 BACKWATER VALVE AND DRAIN PIPE. Backwater valves (one at each end) shall be Tyler Pipe/Wade Division Model 4203, for 3-inch PVC pipe connections. Drain pipe shall be 3-inch Schedule 40 PVC suitable for drainage of petroleum products.

CONSTRUCTION REQUIREMENTS

80099I-3.1 CONSTRUCTION REQUIREMENTS. The construction shall be completed as shown in the plan, details and notes shown in the Plans. CA-6 aggregate along the trench base shall be spread and compacted to the satisfaction of the Resident Engineer. Installation of the frame and lid shall be in accordance with manufacturer's recommendations. Connection of the drain pipe from the backwater valve to the culvert pipe at the north end and the sump manhole at the south end shall be in accordance with Item 701 and Item 751, respectively.

METHOD OF MEASUREMENT

80099I-4.1 The quantity of utility trench measured for payment shall be the actual linear feet of trench measured along the trench centerline furnished and installed by the Contractor and accepted by the Resident Engineer. Separate measurements for crushed aggregate base, concrete, reinforcing steel, frame and solid lid, backwater valve and drain pipe shall not be made, but their costs shall be included in the Contract unit price per linear trench for PCC Utility Trench.

SPECIAL PROVISIONS

CHICAGO-ROMEDEVILLE AIRPORT (LOT)

EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38

IDA PROJECT NO. LOT-344I

BASIS OF PAYMENT

800991-5.1 This work will be paid for at the Contract unit price per linear foot of accepted PCC Utility Trench, which price shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including all required crushed aggregate, concrete, steel, frame and lid, backwater valves, drain pipe, and all other incidentals necessary to complete the item as specified.

Payment will be made under:

Item AR800991 PCC Utility Trench - per linear foot.

ITEM 800993

BOLLARD

GENERAL

800993-1.1 This item shall consist of furnishing and constructing a protective bollard at the locations shown and in accordance with the details shown in the Plans, and as directed by the Resident Engineer.

MATERIALS

800993-2.1 CONCRETE. Concrete shall meet the requirements of Item 610.

800993-2.2 STEEL PIPE. Steel pipe used in constructing the bollard shall be 6-inch Schedule 80 steel pipe. All steel used in the construction of this item shall be domestically produced and the Contractor shall provide the Resident Engineer a statement certifying to this fact.

800993-2.3 PAINT. Paint shall be epoxy type, yellow, meeting the requirements of Item 620.

CONSTRUCTION REQUIREMENTS

800993-3.1 CONSTRUCTION REQUIREMENTS. The construction shall be completed as shown in the plan, details and notes shown in the Plans.

METHOD OF MEASUREMENT

800993-4.1 The quantity of bollards measured for payment shall be the actual number of bollards completed by the Contractor and accepted by the Resident Engineer. Separate measurements for concrete, steel pipe and paint shall not be made, but their costs shall be included in the Contract unit price per each for Bollard.

BASIS OF PAYMENT

800993-5.1 This work will be paid for at the Contract unit price per each of accepted Bollard, which price shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, including all required concrete, steel pipe, paint, and all other incidentals necessary to complete the item as specified.

Payment will be made under:

Item AR800993	Bollard - per each.
Item AS800993	Bollard - per each.

DIVISION V - TURFING

ITEM 901

SEEDING

Revise Item 901 of the Standard Specifications as follows:

901-1.1 DESCRIPTION. Add the following:

"The following definitions apply to this item:

- "1. Growing Season - The time of year, between March 15 and October 15, during which plants are actively growing.
- "2. Vigorous Condition - A characteristic of healthy vegetation which includes proper growth forms, lack of dead or dying portions, and strong vegetative and root systems."

901-2.1 SEED. Add the following:

"The seeding mixture for areas of grass seeding shall be:

“❖ **Seeding**

<u>Common Name</u>	<u>Pure Live Seed Per Acre</u>
Kentucky Bluegrass	150
Red Fescue	50

"The seeding mixture for areas of conservation cover shall be:

“❖ **Conservation Cover**

<u>Common Name</u>	<u>Pure Live Seed Per Acre</u>
Smooth Brome Grass	40
Vernal Alfalfa [1]	15
Oats, Spring	48

"[1] Legumes - inoculation required.

"Season mixes may be planted if prior approved by the Project Engineer, provided that the ground is not frozen or conditions are not detrimental to the seed.

"A sample of selected seed species shall be made available on request to the Resident Engineer for viability testing by the tetrazolium trichloride method, not less than 21 calendar days prior to planting.

"Seed mixtures shall contain the proportion of seed of individual species indicated in the planting design. Changes in seed mixtures must be approved by the Project Engineer.

"Seed of each species shall be individually packaged in suitable bags and inspected by the Resident Engineer before mixing. The mixing of seed shall be performed with the Resident Engineer present.

"All seeds shall be guaranteed by the Contractor to be true to name. All seeds shall have the proper pre-planting treatments, including stratification, scarification and/or inoculation to promote good germination and growth, prior to any seeding.

"All seedings shall be planted at the specified rates, utilizing the specified species unless otherwise authorized by the Project Engineer.

"Areas shall be de-watered if necessary to accomplish any specified plantings. The method of de-watering shall be approved by the Resident Engineer.

"Measures to protect planted materials from grazing damage by wildlife shall be recommended and provided by the Contractor."

901-2.2 LIME. Delete this Section in its entirety.

901-2.3 FERTILIZER. Add the following:

"Fertilizer shall be applied to all areas designated for seeding at 1:1:1 ratio as follows:

Nitrogen Fertilizer Nutrients	90 pounds per acre
Phosphorus Fertilizer Nutrients	90 pounds per acre
Potassium Fertilizer Nutrients	90 pounds per acre

"The fertilizer shall be incorporated into the soil to a depth of not less than three (3) inches."

901-3.1 ADVANCE PREPARATION AND CLEANUP. Add the following sentence to the second paragraph:

"Soil shall be prepared to have clods no more than 1 1/2 inches on any side to ensure adequate seed-soil contact."

Add the following paragraphs:

"Final grading and site preparation must be inspected and approved by the Resident Engineer prior to any planting.

SPECIAL PROVISIONS**CHICAGO-ROMEDEVILLE AIRPORT (LOT)****EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK****AIP PROJECT NO. 3-17-0140-B38****IDA PROJECT NO. LOT-3441**

"Soil moisture shall exist throughout the area to be seeded from one inch to at least five inches below the surface at the time of planting. The required moisture content of the soil may be estimated by the hand-squeeze test. The soil should form a tight cast when squeezed in the hand. The cast should break into two pieces without crumbling and without leaving water on the hand after casting.

"Seedbed preparation shall commence as soon as practicable prior to planting. After preparation, these areas shall be protected from erosion.

"All spontaneous vegetation that becomes established after final grading shall be cultivated and/or removed prior to planting. No herbicides shall be used, unless accepted by the Resident Engineer.

"The proposed seeding method shall be stated by the Contractor. The seeding method shall result in a uniform distribution and complete coverage of the entire area to be seeded. If seed drilling is proposed, the seeder shall have an adjustable gate opening provided uniform flow and shall drop the seed directly into place on the prepared seed bed. If the broadcast method is used, within eight hours of seeding, all seeded areas should be rolled at right angles to the slope with a roller, cultipacker or hand tamped to compact the seedbed. Any areas broadcasted shall be sufficiently rolled or tamped to assist proper germination. All seeding equipment shall be calibrated to ensure the proper flow of seeds to deliver the specified quantities. The Contractor shall use only seeding equipment that is designed to plant grasses.

"All seeding shall be provided within the growing season stated in Section 901-1.1, unless season mixes are prior approved by the Project Engineer and conditions are acceptable for seeding as noted in Section 901-2.1.

"Installation and maintenance of erosion control measures pertinent to seeding shall be the responsibility of the Contractor. Erosion control measures which may be damaged and/or removed by the Contractor during planting and related work shall be replaced by the Contractor.

"If on-site conditions change or are otherwise altered due to circumstances beyond the control of the Contractor, the Owner, and/or the Project Engineer, such that the Specifications and/or drawings are no longer valid, the Contractor shall notify the Resident Engineer so that remedial measures may be undertaken."

901-3.4 MAINTENANCE OF SEEDED AREAS. Add the following:

"The Contractor shall be required to establish a stand of grass in areas designated for seeding and a vegetative cover over the areas designated for conservation cover."

901-4.1 METHOD OF MEASUREMENT. Delete this Section in its entirety and replace with the following:

"901-4.1 METHOD OF MEASUREMENT. The quantity of seeding and fertilizing to be paid for shall be the number of acres with (grass) seeding mixture completed and accepted, regardless of the application rate or method of application.

"The quantity of conservation cover and fertilizing to be paid for shall be the number of acres with conservation cover mixture completed and accepted, regardless of the application rate or method of application.

"The quantity of water utilized for seed bed preparation, maintenance of the seeded and covered areas and water used as a carrier for seed in hydraulic seeding operations, if used, shall be considered incidental to seeding or cover and will not be measured for payment."

901-5.1 BASIS OF PAYMENT. Delete this Section in its entirety and replace with the following:

"901-5.1 BASIS OF PAYMENT. The quantity, determined as provided in Section 901-4.1, will be paid for at the Contract unit price per acre, or fraction thereof, for seeding, which price and payment shall be full compensation for furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete the Work in this item as specified.

"Water utilized for bed preparation and maintenance of the seeded or covered areas shall be incidental to the Contract prices for seeding or conservation cover.

"Payment will be made under:

"Item AR800937 Conservation Cover - per acre.
Item AR901510 Seeding - per acre."

ITEM 905

TOPSOILING

Revise Item 905 of the Standard Specifications as follows:

DESCRIPTION

905-1.1 Add the following:

"Topsoil shall be from on-site and created by stripping of topsoil from within the grading limits shown in the Plans and temporarily stockpiled at locations designated by the Resident Engineer for re-spreading under this Item. Stripping of the topsoil and placing in the temporary stockpiles shall be paid under Item AR152410."

CONSTRUCTION REQUIREMENTS

905-3.4 PLACING TOPSOIL. Delete the first sentence of the first paragraph and replace with the following sentence:

"The topsoil shall be evenly spread on the prepared areas to receive seeding to a uniform depth of four (4) inches after compaction."

Add the following:

"The topsoil after placement shall be prepared in accordance with the requirements of Item 901 prior to application of seeding and mulching."

METHOD OF MEASUREMENT

905-4.2 Delete this Section.

BASIS OF PAYMENT

905-5.1 Add the following:

"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 Specifications, Supplemental Specifications and Special Provisions, the pay item shall not be included on the Contractor Progress Payment report until such submittals have been furnished."

905-5.2 Delete this Section.

SPECIAL PROVISIONS
CHICAGO-ROMEOVILLE AIRPORT (LOT)
EXTEND TAXIWAY E; CONSTRUCT APRONS & AUTO PARK

AIP PROJECT NO. 3-17-0140-B38
IDA PROJECT NO. LOT-344I

Payment will be made under:

Item AR905510 Topsoiling (From On Site) - per cubic yard.

ITEM 908

MULCHING

Revise Item 908 of the Standard Specifications and Supplemental Specifications as follows:

DESCRIPTION

908-1.1 Add the following:

"Material used for mulching shall be a manufactured mulch applied by a hydroseed spray application at the rate approved by the Resident Engineer.

"Mulch shall be provided on all areas with seeding (grass). **Mulch shall not be applied to areas designated for conservation cover.**"

MATERIALS

908-2.1 MULCH MATERIAL. Add the following:

"Only manufactured hydraulic mulch as specified in the Supplemental Specifications may be used."

CONSTRUCTION METHODS

908-3.1 MULCHING. Add the following:

"Mulch shall be applied using the "hydraulic mulch" method specified in the Supplemental Specifications."

BASIS OF PAYMENT

Payment will be made under:

Item AR908510 Mulching - per acre."

(END OF SPECIAL PROVISIONS)



Hanson Professional Services Inc.
815 Commerce Drive, Suite 200
Oak Brook, Illinois 60538
630.990.3800

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.